REPORT

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OF THE

BOARD OF EDUCATION,

BOMBAY,

FROM

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Board of Education.

April 30th, 1854.

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To the Right Honorable

LORD ELPHINSTONE, G.C.H.,

Governor and President in Council,

Bombay.

My Lord,

We have the honour to lay before you a Report of the educational institutions under our charge for the year ending April 30th, 1854.

2. Previous, however, to entering into a detailed statement of the present condition of these institutions, we beg to make a few general remarks on the more prominent events which have occurred. And, first, we desire to express our gratification at the late intimation that the Honorable the Court of Directors have admitted the public servants in the educational department to the benefit of pensions; a measure which we regard as one of the most important events of the year. In thus placing your educational servants on an equality, in this respect, with the public servants of all other departments, a step has been taken which we believe to be better calculated to increase the efficiency of our Native teachers, and to elevate them in the estimation of their fellow countrymen, than any that could have been adopted. While thus congratulating this deserving class of public servants on the great improvement thus made in their position, we would remind them that a pension can only be obtained by a lengthened and undeviating career

Admission of the Educational Department to the benefit of Pensions.

of creditable exertion in their respective schools; and we would warn the indolent and indifferent that the character, conduct, and past services of each teacher must be favourably certified by the officers under whom he may have served, before he will be considered entitled to the indulgence. We would also further warn them that ignorance and indolence will no longer be tolerated, but that higher qualifications and greater activity will hereafter be looked for from every member of the establishment.

Same subject.

3. In making these brief remarks on the pension boon as applicable to our Native teachers, we beg at the same time to congratulate most warmly the small band of European gentlemen in the department on the brightening of the prospect before them. While, with two exceptions, they have all been more than six years in the service, and working without prospect of eventual reward, the senior has been labouring for nineteen years; and though this gentleman's exertions have been of the most vital importance in carrying out successfully the Government system of education in the largest of our institutions, and though to his great ability and unremitting zeal we are mainly indebted for the successful progress of the Institution through so many years, he has, until now, been uncheered by that which has animated the exertions of public men in all other departments, viz. the knowledge that his latter days would be provided for by the Government to whose service he has been devoting the best years of his life.

General results of the year satisfactory.

4. On taking a general view of the state and progress of education during the year, we believe we are justified in asserting that the results have been most satisfactory. The Elphinstone Institution,

the Poona College, and the Grant Medical College,—all guided by Principals of great ability and large experience,—are in excellent order, whether we look at the increased number of students, at the extent of their acquirements, or at the internal economy and discipline. Our English schools show a considerable increase in the number of pupils, and in several the course of instruction has been extended; while our Vernacular schools have been greatly improved by the adoption of the measure we mentioned in our last report for removing the worn-out and incompetent teachers, and for replacing them by efficient men. Not only do these schools now show a very considerable increase in the number of pupils, but the reports of our Superintendents prove that they are in a more satisfactory state; and we have much pleasure in recording our satisfaction with the zealous manner in which the duties of our schools generally have been performed, as well as with the efficiency of the superintendence to which they have all been subjected, the Superintendents appearing to be fully sensible that on their energy and vigilance mainly depends the success of our efforts to maintain the numerous schools scattered over the country in a creditable state.

Increasing desire for Education.

5. The year has also afforded proof, not only of an increasing anxiety to participate in the advantages of education when offered nearly free of expense, but, what is far better, of a strong and sustained desire on the part of several Native communities to make considerable pecuniary sacrifices for the sake of securing an education for their children, more especially in English.

Successful efforts to es-

6. Foremost in this wise course stands Khandesh. We mentioned in a late report that there was an increasing

tablish an English School at Dhoolia.

desire for education in this province, and that it appeared to have peculiarly strong claims to consideration; but that we had been compelled, from want of means, to turn a deaf ear to all appeals for assistance. The desire for education nevertheless increased, and great exertions were made by the inhabitants to raise sufficient funds for supporting an English school at Dhoolia. It is but justice to state that these exertions were stimulated and directed by Captain Kane, who showed the greatest zeal, while employed in Khandesh, in awakening the province to the value of education. Mainly through his influence, a sum of Rs. 12,000 was raised for the establishment of an English school at Dhoolia, but notwithstanding our anxiety to render assistance, we found it impossible, in the then existing state of our funds, to bear any portion of the expense. In this state of matters, all we could do towards fostering the spirit which was showing itself was to suggest for the consideration of the inhabitants the adoption of one of two plans for expending beneficially the interest of the amount subscribed, viz. either the establishment of an elementary English school at Dhoolia, on condition of the inhabitants engaging to provide a monthly sum of Rs. 25 for the master, in addition to the interest of the Rs. 12,000 to be similarly appropriated; or *2nd*, the establishment of five or six scholarships, of the monthly value of Rs. 8, to be paid out of the interest of the capital, and allotted, after examination, to the best pupils of the Vernacular schools at Dhoolia and Malligaum, for the purpose of enabling them to prosecute their studies in English at the Poona College or Elphinstone Institution. This latter plan seemed in some respects more desirable than the former, inasmuch as it provided means for the most promising youths of the

province to pursue their English studies under the most able professors in our service.

Same subject.

7. The inhabitants, however, did not appear to approve of these views, and the subject for a time was dropped; but, ere long, renewed efforts were made, with the active encouragement of Mr. Mansfield and Mr. Anderson, to increase the subscriptions, and we are happy to say with such great success, that the amount at last reached Rs. 25,000. A school was then established, and conducted on the same principles as the English schools in other parts of the Presidency, the inhabitants engaging to defray the whole expense, including a salary of Rs. 100 a month for the master. To this post we appointed Náráyán Bulál, an able assistant teacher in the Elphinstone Institution. The school was opened in October, in the presence of all the European and Native society of the station, and an impressive address on the occasion was made by Mr. Anderson, to whom and to Mr. Mansfield we take this opportunity of expressing our acknowledgments.

Excellent example set by Khandesh.

8. The conduct of the inhabitants in raising this large sum is beyond all praise, and sets a bright example to the other collectorates, not one of which has ever raised an educational subscription of one-sixth the amount. On completing the arrangements, the Committee expressed a hope, that as soon as we had increased funds at our disposal, we should not be unmindful of the claims of Khandesh; and we had no hesitation in stating, that under the circumstances, here detailed, we should not fail to give the fullest consideration to the claims of a province which had thus stood forward in promoting its best interests; and nothing will be more gratifying to us

than to lend a helping hand towards the intellectual advancement of its inhabitants, now that our means will allow us to do so. In the mean time, the Committee very properly reserved to themselves the entire control over the amount subscribed, for the purpose hereafter of devoting a portion to the founding of scholarships, with the view of enabling the best of their youths to pursue their studies in more advanced institutions, and we regard this object as most sound. There can be no doubt that scholarships, when awarded, after examination, to the most advanced pupils, are calculated to stimulate the industry of the whole school, and to raise its character in public estimation. The annual award is looked forward to as the great event of the year, as the best test of the efficiency of the school, and as the just reward of continuous efforts to acquire distinction.

Unsuccessful efforts to establish an English School at Sholapoor.

9. While these successful efforts were being made by the inhabitants of Khandesh to establish an English school at Dhoolia, strenuous exertions were also being made to establish one at Sholapoor, but unhappily with different results, for these exertions have hitherto proved unsuccessful. A Committee was voluntarily formed at Sholâpoor for the encouragement of Native education, consisting of the heads of the Civil departments, the principal Native officials, and many of the most respectable inhabitants of the town. Mr. Nana Morojee, the newly appointed Deputy Collector, who had himself been educated in the Elphinstone Institution, was one of the principal movers in these efforts, and was made Secretary to the Committee. The immediate objects of the Committee were the establishment of an English school and a library, and for these purposes a sum of Rs. 2,500 was at once raised by

private subscriptions among the European and Native community of the station. This is but a small sum, it is true, compared with the large amount raised in Khandesh; but considering that the inhabitants are chiefly illiterate Wanees and Mahomedans, remote from the Presidency, it was nevertheless encouraging. We were urged to lend a helping hand by bearing the expense of a master, but, as in the case of Dhoolia, and for the same reason, we were reluctantly compelled to refuse assistance, Government having decided, that in consequence of our heavy surplus expenditure, all new schools must be entirely self-supporting. It would, moreover, have been impossible, in common justice, to have done for Sholapoor what we had previously refused to do for Khandesh. We pointed out that in the then existing state of affairs, the only way in which a school could be established was by the inhabitants engaging to provide the master's salary. This, however, they were unable to do.

Board's regret at this failure.

10. We regretted this failure the more, because we were satisfied that an eager desire for the advantages of an English education had been manifested by many of the inhabitants, and we have reason to believe that further subscriptions will be raised among them now that we have been placed in a position to render assistance. Sholapoor and Kaira are now the only two of the twelve Collectorates of this Presidency which are unprovided with institutions for instruction in English. As Kaira, however, is only twenty miles from Ahmedabad, the want of an English school is not much felt; but it is very different with Sholapoor, which, being a frontier town, is far removed from the civilizing influences of places more favourably situated.

11. Notwithstanding the discouragement produced by inadequate means, and a surplus expenditure which we had been directed by Government to reduce within our income, we gave much consideration to various plans which seemed to afford a hope of enabling us to render assistance, and at the same time to introduce a partially self-supporting system. As the most feasible of all, it occurred to us that the time had arrived for calling upon the inhabitants of all towns where English schools had been supported by Government, to come forward and engage to defray one-half the expense. By adopting this step, it was evident that a portion of the benefits which these towns had long enjoyed would still be retained, and that with the saving thus effected we should be able to extend similar benefits to Khandesh, Sholapoor, and other places, which had shown their readiness to make pecuniary sacrifices for the sake of educating their children.

Further attempts to introduce a partially self-supporting system.

12. We accordingly called upon the inhabitants of Surat, Broach, Ahmedabad, Ahmednuggur, and Rutnagiri, to come forward and meet our views to this extent. We explained that our annual reports of late years had dwelt much on the fact of our operations having been cramped from want of means. We reminded them of the statement in our report for 1851-52, that we were then spending Rs. 19,000 annually more than our income, and we stated, that although this large amount of surplus expenditure had, by means of rigid economy and retrenchment, been diminished, our expenditure still continued greatly above our resources. We pointed out, that notwithstanding this state of matters, we had received urgent entreaties from various

Same subject.

quarters for assistance in establishing schools, but that hitherto we had been compelled, from want of means, to turn a deaf ear to these entreaties. We alluded to the public spirit which had been shown by the inhabitants of several zillahs, and we expressed our conviction that we were bound, if possible, to assist their laudable efforts in supporting schools. We noticed the fact of an English school having been recently opened at Dhoolia, supported solely by funds raised in Khandesh, and we reminded them that the inhabitants of a small town like Dharwar provided Rs. 50 a month towards the master's salary, and that Tanna did the same. We regret to say that the inhabitants of these towns have hitherto been backward in replying to our appeal.

Measures for introducing Education into Katiawar.

13. We now turn to the commencement of operations in Katiawar. In our last report we gave a detail of the measures which had, up to that time, been decided on for introducing an improved system of education into that province. These measures consisted in the establishment of a central institution at Rajkote and branch schools in the districts, the medium of instruction in the former being the Vernacular as well as English, while in the latter it was intended to be solely the Vernacular. We at the same time stated, that in deference to the opinions of the political authorities in Katiawar, we had decided on nominating an educated Native of talent and experience in the double capacity of Head Master of the Central Institution and Superintendent of Schools in the districts.

Nomination of Head Master of Central Institu-

14. At the date of our report, however, the selection of the Head Master and Superintendent had not been made, and

tion, and Superintendent of Schools in districts.

we were at the time in correspondence with Colonel Lang on the subject. There were several difficulties in the way of securing the services of a man of the precise character required, and we felt that we could hardly over-estimate the importance of a selection, on which the successful working out of the scheme of education so much depended. In addition to a thorough qualification for his duties from the possession of the requisite amount of acquirements, there were several circumstances connected with the peculiar political and social character of the province which had to be considered, and above all we required a man of experience, who possessed energy and firmness, as well as conciliatory manners. After much correspondence, we ultimately selected Bhogilál Pranwulubdás, who had for seven years been master of the English school at Ahmedabad, and we have reason to believe that he will be successful in creating an increased desire for education in this province. It was the opinion of the Political Agent, equally with ourselves, that Bhogilál Pranwulubdás possessed most of the qualifications required, but there was at first some difficulty about the amount of pay. The Political Agent proposed Rs. 200 a month, that being the salary of the highest paid Native functionary in the service of Government in Katiawar, and he considered it objectionable in principle to give a higher rate to any Native appointed to the situation in question. We scarcely considered this amount, however, sufficient for an able man, who had for seven years held the appointment of master of a large English school, and that too in his Native city. With all deference, therefore, to Colonel Lang's opinion, and with every desire to meet his views on this as well as on all other subjects, we strongly recommended

a salary of Rs. 250, for we did not consider his objection of so important or grave a nature as to counterbalance the very obvious and great advantage of securing the services of an able and experienced man, and of fixing such an amount of salary as would in itself give him that influential position in Native society which could not fail to further the interests of education. Colonel Lang waived his objection, and Bhogilál Pranwulubdás assumed charge of his duties the end of August.

Progress already made in Katiawar.

15. Since that date, Bhogilál has not only been assiduously engaged in organizing the central institution at Rajkote, but, with the advice and assistance of the Political Agent, he has already been moving about through the province of Katiawar, and has established Vernacular schools at Nowanagur, Morbi, Vadhwan, and Dhoraji, and he hopes to establish schools in several more places as soon as he can procure competent teachers. Vernacular schools had previously been established at Rajkote and Junaghur by the Political Agent, who has also appointed tutors to the Chiefs of Nagnesh, Laktar, Chuda, Gondal, Vankaner, and Rajkote. At each of these towns, too, the tutors have formed small schools. On the recommendation of Colonel Lang, the names of these tutors have been entered on the educational establishment of Katiawar, as entitled to compete with the other teachers for any superior situations which may become vacant. We cordially approved of the suggestion as being calculated to keep up the work of self-improvement, as well as a wholesome spirit of emulation among all the teachers in the province. Including these tutors, the Katiawar establishment now consists of sixteen teachers, who give instruction to 817 pupils. We trust that this

commencement of proceedings in the education of a people, whose feelings were supposed to present unusual obstacles to our efforts, will be considered satisfactory, and we beg to congratulate the political authorities of the province on these first-fruits of their labours. We would also take this opportunity of recording our obligations to Colonel Lang and Major Aston for their valuable assistance and cordial co-operation in every step that has been taken.

Formation of local committee.

16. For the purpose of making the new system of education as popular as possible, and of keeping up the interest of the Chiefs and other inhabitants of the province, a local committee has been formed, consisting of the Political Agent as President *ex officio*, and of his First Assistant and four of the most intelligent and influential Agents or Karbarees of the prinpal Chiefs, as members. As the Head Master of the central institution has been directed to conduct his correspondence with us through the channel of this committee, and as our correspondence with him is addressed in like manner, the committee are kept acquainted with all matters concerning the institution, and have an opportunity of suggesting any improvements they may deem desirable.

Educational proceedings in the Sattara province.

17. In our last report we mentioned that a commencement had been made in extending the benefits of education to the province of Sattara, and we stated the measures which had been adopted in communication with the Commissioner, and the principles on which future steps would be taken. We explained the necessity which had led us to remodel the existing school in the capital, and to place it on the general footing of our English schools in other parts of the Presidency. We

also stated that we had established two Vernacular schools at Sattara, and one at Wai.

Establishment of Schools at Bijapur, Pandharpur, and Kurar.

18. We have great satisfaction in stating that these schools are all working well, and that we have lately established others at Bijapur, Pandharpur, and Kurar. The inhabitants of each of these places have provided school furniture and suitable buildings. To Bijapur we appointed as master Kashinath Vishwanath Shástri, a young man who had been educated in the Poona College, and who had gained considerable experience in the art of teaching in one of the schools of the Student's Literary and Scientific Society. To Pandharpur we nominated Sitárám Bálcrishna, and to Kurar Ganesh Naráyan, both students of the normal department of the Poona College. They are all good Maráthi scholars and have a fair knowledge of Sanscrit, and they are sufficiently advanced in English to be able to teach an elementary class in it. Although these schools are Vernacular ones, we purposely selected as masters men acquainted with English, on the principle that a teacher possessing a knowledge of this language, and having his education thus founded on a wider basis, will be more competent to give a sound education, even in Maráthi solely, than a man merely acquainted with his Vernacular.

School established at Atpadi by a Jagheerdar.

19. It gives us satisfaction to state that one of the Sattara Jagheerdars has established a school at his own expense, and we trust the example thus set may be followed by others. We allude to Punt Pratinidhee, who applied for a master to open a school at Atpadi.

20. The subjects of study in our schools remain unchanged, excepting that we have recently introduced the Civil and Criminal Regulations as voluntary studies in the senior class of our English, Maráthi, and Gujaráthi schools, village accounts in the second class of our Maráthi schools, and the Joint Survey Report Rules in the second class of our English and Maráthi schools. We cannot at present introduce these rules into the Gujaráthi schools, as no translation into this language has yet been made. We also propose to introduce talook accounts into the Maráthi schools, and both village and talook accounts into the Gujaráthi schools, as soon as we are provided with copies in these languages.

Introduction of the Civil and Criminal Regulations, Village Accounts, and Joint Report Rules, as subjects of study.

21. Our reason for introducing these studies was to enable such students as wished for Government employment, to qualify for such employment in accordance with the terms laid down by Government in the Rules of May 1852, relative to admission into the lower grades of the public service. Among the requisite qualifications is a knowledge of these subjects, and it seemed to us desirable to take some step for enabling the pupils of our schools to compete with success at the examinations required by these rules. It was notorious that our students were either altogether excluded from public employment in the revenue and judicial departments from a want of some knowledge in these subjects, or were compelled for a long time previously to attend public offices for the purpose of acquiring such knowledge. We therefore thought that the most desirable way of attaining the end in view would be to introduce these works as part of the general

Reason for introducing them.

course of instruction, making their study, however, quite voluntary, and taking especial care to ensure their not interfering in any way with the regular course of study in other subjects. We were also of opinion that their introduction would tend to make the schools more popular, as well as to secure a more regular attendance, and that it would create a wholesome spirit of emulation both among the masters and pupils.

Opinion of our Superintendents on the subject.

22. As the question was of some importance, however, and as it seemed probable that such a step might be deemed objectionable by some, on the ground that the study of such subjects should be commenced after leaving school, as all special professional studies are, we thought it desirable to obtain the opinions of the six gentlemen in the department who were, or had recently been, Superintendents of Schools. One of these gentlemen was of opinion that the works specified could not be introduced with advantage, as the "exclusive nature of the subjects appeared incompatible with the unexclusive character of public schools of general learning." But, with this one exception, the Superintendents were all in favour of their introduction, on the general ground that as a knowledge of these subjects is required by Government as a qualification for employment, it seemed desirable that the attainment of that knowledge should be placed within the reach of the youths attending our schools. We accordingly decided on their introduction into the two highest classes of our schools, the study being perfectly voluntary on the part of every pupil; in no case imperative.

Native Libraries.

23. In previous reports we noticed the commencement which had been made in establishing Native libraries in some

of the principal zillah towns of this Presidency. In addition to those which we mentioned as having at that time been formed, libraries have since been established at Sawunt Waree and Násik, as well as one at Poona for the use of such castes as could not gain admittance into the Native General Library. To each of these libraries, at the request of their committees, we presented a set of maps and a copy of each of our Vernacular publications, and we have assisted to the same extent seven more Native libraries which have recently been established in Bombay. Native libraries, therefore, now exist at Ahmednuggur, Poona, Sholapoor, Belgaum, Sattara, Rutnagiri, Tanna, Surat, Baroda, Ahmedabad, Sawunt Waree, and Násik, besides ten in Bombay itself. We are thus, year by year, accumulating additional proof of the general demand for reading and instruction which is so clearly developing itself; and although in the present state of Vernacular literature, and with the present scanty stock of standard Native works, we do not expect any great results immediately, yet, with the assistance of English works, we may fairly expect these libraries to be the means of diffusing in the course of time much general knowledge among the masses of Indian society. We have reason to believe that much interest is taken in most of these libraries by the different Native communities, and we have placed in the appendix all the reports on their state with which we have been favoured during the year.

Establishment of Library at Násik.

24. The movement for the formation of these libraries at Násik, Sawunt Waree, and Poona, was a spontaneous one, originating solely with the Natives. In the case of the library at Násik we were applied to for assistance direct by the Native committee.

Mr. Jenkins and Mr. Turquand subsequently furthered the views of the inhabitants, and told us that a sufficient sum would be raised by monthly and annual subscribers to defray the ordinary expenses incurred in supporting it. Donations were also made by private individuals to the extent of Rs. 220.

Establishment of Library at Sawunt Waree.

25. In the case of the library at Sawunt Waree, a sum of Rs. 846 was raised by subscription among the Sirdars, Karkoons, and other inhabitants. Mr. Anderson was Political Agent at the time, and gave his customary warm assistance; but the movement commenced among the Natives themselves, a great number of whom came forward spontaneously, and expressed their wish that a library should be established. When Mr. Anderson was leaving Sawunt Waree, the building for the library was nearly completed, and it was said to be a great ornament to the town.

Establishment of Library at Poona.

26. There were peculiar and interesting circumstances connected with the establishment of the library at Poona, which seem worthy of being noticed. In our report for 1851-52 we drew attention to the zeal which was then manifesting itself among the best educated of the young men, trained in the English department of the Poona College, to diffuse improvement among their fellow-countrymen. We noticed also their spontaneous movement,—akin to that which had previously taken place in Bombay,—in favour of female education; and we mentioned in particular that Joti Govind Rao, a young Native of the Malee caste, had not only formed a female school, in which he taught gratuitously for four hours a day, but that he had also trained his wife for the office of

schoolmistress. His exertions in the cause of enlightenment, however, did not end here. With equal courage and perseverance, and notwithstanding the prejudices by which he was surrounded, he laboured successfully to establish a school for Mahars and Mangs, and in thus striving to raise the condition of these despised castes, he said he acted in "conformity with the dictates of conscience, and, above all, the will of God."

Same subject.

27. Having thus established his low caste school, he soon found a great desire manifested by the pupils for the establishment of a library, and again he devoted himself to the attainment of this object, and once more he succeeded. He has thus the credit of having been the main cause in establishing the first female school in Poona, the first school for Mahars and Mangs in the same city, and the first Native library for these castes. He has thus in a threefold manner devoted himself to the interests of his countrymen; but in justice to others we ought to add that he has been greatly assisted in his latter labours by several of the educated young men in Poona. It gave us great satisfaction to observe, by Major Candy's recent report on the Poona College, that the assistant professors, and several of the assistant teachers and senior students of the college, take a warm interest in this low caste school, as well as in the female schools, and that these useful institutions receive countenance and aid from the principal and professors in every suitable way.

State of the Educational Finances.

28. We now turn to the state of our finances. In our report for 1851-52, we mentioned that our expenditure exceeded the amount of the annual educational grant by Rs. 19,681, and that we

were, in consequence, not only compelled to turn a deaf ear to all applications for assistance in establishing new schools, but were also compelled to strive by every possible means to reduce our expenditure within the limit of our income. In our last report we mentioned the measures which had been adopted with this end in view, and we showed that in carrying out these measures, and by maintaining a rigid adherence to economy in every direction, we had reduced the excess of expenditure over income to Rs. 10,877. By persisting in the same course of retrenchment and economy, our surplus expenditure, as shown in the Civil Auditor's last annual statement, is now still further reduced to Rs. 6,826. We at the same time explained that this surplus expenditure had been defrayed out of a reserved fund which had been formed from the unexpended portions of the grant of former years, but that this fund was nearly exhausted. In each of our late reports, we pointed out the utter inadequacy of the existing amount of the annual grant for the increasing requirements of Western India, and we stated that on an increase to the means at our disposal depended not only all hope of progress, but even the possibility of keeping up existing institutions.

Increase to Annual Educational Grant.

29. This discouraging state of matters continued till a short time ago, when the gratifying information was received that the Honorable Court of Directors had made an addition of Rs. 50,000 to the annual grant of Rs. 1,25,000, exclusive of Rs. 7,000 for the province of Sattara, and Rs. 10,000 for Scinde. If to these sums be added the annual allowance for the Poona College, and the expense of the Grant Medical College, the total amount of public funds appropriated for educational purposes will be about Rs. 2,50,000. This increase to the annual grant is the most important event of the year.

It will enable us to put existing institutions into a more thoroughly efficient state, to render assistance in many quarters where we have hitherto been unable to lend a helping hand, and to extend our operations in various directions. In our next report we shall be prepared to enter into a detail of the measures which may be adopted.

Total number of Students.

30. Having thus dwelt briefly on some of the more important events of the year, we now proceed to the more special object of our report, viz. to notice separately the state of the different institutions under our charge ; and we beg to preface our remarks with the following table, showing the total number of youths receiving Government education at the close of March 1854. Compared with a corresponding table in our last report, it shows an increase of 3,211 pupils.

ENGLISH COLLEGES AND SCHOOLS.

	No. of Students.
Elphinstone Institution	1,044
Poona College	476
Ditto ditto Branch School	118
Grant Medical College	65
Surat English School	365
Ahmedabad ditto	162
Broach ditto	65
Ahmednuggur ditto	63
Rutnagiri ditto	45
Tanna ditto	99
Dharwar ditto	47
Sattara ditto	100
Rajkote ditto	55
Dhoolia ditto	77
	2,781

Vernacular Schools.

	No. of Students.
1*st Division.*—Collectorates of Poona, Ahmednuggur, Sholapoor, and Khandesh, and the province of Sattara.....	6,620
2*nd Division.*—Collectorates of Surat, Broach, Kaira, and Ahmedabad	3,099
3*rd Division.*—Collectorates of Tanna, Rutnagiri, Belgaum, and Dharwar.	4,351
In the province of Katiawar.....	762
At the Presidency.....	474
Vernacular.....	15,306
English.....	2,781
Total number of students....	18,087

ELPHINSTONE INSTITUTION.

Establishment of Professors on April 30th, 1854.

Principal, and Professor of Logic, and Mental and Moral Philosophy	JOHN HARKNESS, A.M.
Professor of History, Literature, and Political Economy	R. T. REID, LL.B. (Europe.)
Acting ditto	R. S. SINCLAIR, A.M.
Acting Professor of Mathematics and Natural Philsophy	DÁDÁBHÁI NAOROZJI, Esq.
Professor of Chemistry, Botany, and Geology	H. GIRAUD, M.D.
English Master	W. DRAPER, A.M.

No change among the Professors.

31. No change has taken place among the Professors during the year. We mentioned in our last report that Mr. Reid, Professor of History and Literature, went to Europe in March 1853, on a twelvemonths' leave of absence. This leave, as a special case, has been extended till the end of September next. In the mean time Mr. Sinclair, Professor of Mathematics and Natural Philosophy, continues in charge of Mr. Reid's duties, and Mr. Dádábhái Naorozji in charge of Mr. Sinclair's. Mr. Reid's absence has not caused any inconvenience to the Institution, as might perhaps have been expected from the limited number of professors, for as Mr. Sinclair possessed very high testimonials in literature as well as in science, we had no difficulty in supplying Mr. Reid's place. We have thus had practical proof of the advantage of procuring the services of a professor

thoroughly competent to teach in either department, according to the exigencies of the Institution; and it is but justice to Mr. Sinclair to state, that he met our views and wishes on these points with the utmost readiness.

Principal's Report.

32. The annual examination commenced on 28th November, and continued till the 17th December, the examinations each day lasting from 11 A. M. till 5 P. M. The result was very satisfactory, and proved that the duties of the year had been ably and zealously performed. In February the Principal sent in his annual report, and a copy will be found in the appendix. Its general arrangement and classification of subjects will be found in its table of contents. It includes separate reports by the different professors on the subjects of their respective classes, examination questions, specimens of answering, and tables containing the results of the examinations. It gives such full details of the state of the classes in every division of the Institution, that it seems quite unnecessary to enter here into any particulars.

Satisfactory state of Institution.

33. We have every reason to be perfectly satisfied with the progress and present state of the Institution in every department. The number of students is larger than at any previous time. The school department, on the efficiency of which the subsequent progress of the students, when transferred to the college department, so much depends, is in an excellent state. The reading of the majority in the best classes was good, the pronunciation correct, the explanations full and satisfactory, their knowledge of the derivation of words tolerably accurate, and the answering in history and geography very creditable. In arithmetic and mathematics

the majority of classes also acquitted themselves well. Much attention, too, has been paid to the vernaculars, and in the higher classes to the elements of Sanscrit among the Maráthi speaking students, and to Persian among the Gujaráthi. The highest class, consisting chiefly of candidates for the college department, never made a better appearance. Its state reflected much credit upon Mr. Draper, the teacher. Twenty-one of the students in this class obtained above 60 per cent. in marks in the English department, and thirteen in the mathematical. One obtained 80 per cent.

34. The extent and variety of the studies in the college division will be seen in the separate reports of the four professors. The classes all came out well. In the division of logic and mental and moral philosophy, the text books include works by Whately, Locke, Cousin, Stewart, and Butler. In literature, Goldsmith, Cowper, and selections from Pope, Bacon, Locke, Boyle, Steele, Addison, and Shakespear. In history, Heeren, Murray, Guizot, Smyth, and Macaulay; and in political economy, Mill, Hancock, Green, and Smith. Of late years great improvement has been made in composition, and Mr. Sinclair has paid the same marked attention to this important subject which Mr. Reid invariably did. In the first year's class alone, for instance, 216 essays have been written on a great variety of subjects. In our last report we mentioned that Mr. Reid had delivered a course of lectures on jurisprudence, and it will be seen that he continued the course till he left Bombay. He commenced by dictating in class a series of notes selected from Reddie's Science of Law, with modifications and additions from Rutherford's Institutes, Austin's Province of Jurisprudence, Story's Conflict

College Department.

of Laws, and the introduction to Morley's Digest of Indian Cases. He then confined the attention of the students to one or two branches of Private Substantive Law, and for this purpose selected the cognate titles of Family Law and Succession. We mention these particulars in justice to an absent professor, who always showed great earnestness in his work of teaching. In Mr. Dádábhái Naorozji's report and tables of results, will be shown the work of the year in mathematics and natural philosophy in the hands of an intelligent and zealous Native professor, who has for many years devoted himself to this department. Dr. Giraud's report on chemistry, botany, and the recently introduced subject of geology, will speak for itself.

Scholarships.

35. The awarding of scholarships was made in accordance with the results obtained by the examinations in December. The number of competitors has of late years so greatly increased that the mere examination of the written answers to questions, for the purpose of awarding to each its proper value in marks, entails great labour on the professors; and this labour sometimes, of necessity, remains to be completed after they have been daily occupied for three weeks in conducting the other duties of the examination. Thus results, which appear so simple on paper, are only arrived at, at the expense of great mental fatigue, and this not unfrequently during early hours in the morning and late hours at night, which would otherwise be seasons of relaxation. Some idea of the labour involved may be formed by our stating that there were 117 competitors for scholarships, and that each competitor had to write answers to several written questions on each of a great variety of subjects,—never less than five, and in most cases eight or nine,—the subjects for the majority of

competitors including logic, mental and moral philosophy, history, literature, political economy, mathematics, natural philosophy, chemistry, geology, and translation. Thus there were several thousand written answers to examine, previous to awarding to each its proper value in marks. As a proof of the great increase in the amount of this labour of late years, we may mention that the number of 1st year's students at the late examinations—forty-one—was greater than the whole number in the college department eight years ago. Such have been the rapid strides of education at the Elphinstone Institution.

Number of Scholarships awarded.

36. The number of candidates found qualified for scholarships considerably exceeded the number of scholarships with which the Institution is endowed. Forty-seven, however, were awarded, viz. three 1st class normal, of the monthly value of Rs. 30 each; six 2nd class normal, Rs. 20 each; twelve West, Rs. 15 each; 24 Clare, Rs. 10 each; and two Gaekwar, Rs. 10 each. As the 1st class normal scholarship is the highest academical distinction which can be obtained at the Institution, we think it right to mention the names of the three students to whom these scholarships were awarded, in the order of merit :—Bálcrishna Sadáshiva, Bhairaonáth Mangesh, and Fardunji Jamshedji. The first obtained 76 per cent. of the estimated value of full answers in the studies of the year, the second 72 per cent., and the third 63 per cent. Balcrishna Sadashiva, therefore, proved himself the best man of the year. A fourth student, Harishankar Bálcrishna, obtained 61 per cent., and thus became entitled to the 1st class scholarship, but as the number is limited to three, a 2nd class normal was awarded to him. This he has since resigned on becoming an assistant teacher in the Institution.

37. As your Lordship presided over the annual meeting for the presentation of scholarships and prizes to the students of the Elphinstone Institution, which was held in the Town Hall on the 3rd ultimo, it seems almost unnecessary to state that the forty-seven scholarships alluded to were on that occasion presented to the successful competitors. In justice, however, to other successful competitors, we take this opportunity of recording that four valuable prizes were presented on the same occasion for the best essays on the four following subjects :—

Presentation of Scholarships and Prizes.

I.—" The Moral and Social Causes of the Crusades, and their effects on Civilization."

II.—" Education of the Natives in the Bombay Presidency; its Results, present and prospective."

III.—" The Electric Telegraph ; the principle of its construction, and the advantages that may be expected to result from its introduction into this country."

IV.—" The influence of a general diffusion of scientific knowledge in dissipating superstitious notions and groundless fears regarding unfamiliar Natural Phenomena."

38. The first prize, being Sir Erskine Perry's gold medal, was awarded to Pestonji Jahangir, who, at the time of competition, was a first class normal scholar, but is now a teacher in the Institution. For this prize there were three competitors, and their essays were all productions of considerable merit. The successful essay was a particularly able one, giving evidence of great research and much reflection. The essayist collected his materials from a wide range, and showed great judgment in selecting and arranging these materials.

Sir Erskine Perry's Gold Medal.

39. The second prize, of the value of Rs. 250, was given by the same Native gentleman, who—as mentioned in our last report—had previously given a valuable prize for the best essay on the "Advantages of Railways." We are not acquainted even with the name of the gentleman who has thus a second time come forward to incite his countrymen to useful mental exercise. The prize was awarded to Kaikhasru Hormazji, formerly a first class normal scholar, and now a teacher in the Institution, and we have great pleasure in recording the very creditable fact that this is the third prize which has been won by Kaikhasru within two years. The first was the Willoughby Prize of Rs. 250, "On the Observance of Truth"; the second, a prize of Rs. 150, "On the Advantages of Railways"; and the third the one just alluded to, "On the Education of the Natives." The successful essay for this prize was a production of considerable merit, and gave proofs of great industry and of much laborious research.

Prize of Rs. 250 by a Native gentleman.

40. The third, the Bell Prize, was awarded to Ardasir Framji, formerly a teacher in the Institution, but now employed in the telegraph department. There were only two competitors. The successful essay evinced very considerable research, and an intimate acquaintance with one mode of constructing the electric telegraph.

The Bell Prize.

41. The fourth, the Sunderji Jewaji Prize, was awarded to Harishankar Bálcrishna, whom we mentioned in a previous paragraph as having competed successfully for the highest class scholarship, and as being now a teacher in the Institution. The style of his essay was not free from

Sunderji Jewaji Prize.

faults, but he treated the subject in a judicious manner, and introduced many sound practical observations.

Prize by His Highness the Rajah of Dhar.

42. We have much pleasure in stating that on the occasion of the late visit to Bombay of His Highness the Rajah of Dhar, His Highness placed at our disposal the sum of Rs. 1,000 for the benefit of the Institution. The amount was invested in the 4 per cent. Government loan, and the interest will be annually appropriated as a prize to the best scholar of the year in the college department; that is, to him who obtains the highest number of marks in the different subjects of examination for the 1st class normal scholarship.

Prize by Rajashree Gunpatrao Vithul Keebay, of Indore.

43. It is also gratifying to state that Rajashree Gunpatrao Vithul Keebay, a rich Brahmin merchant of Indore, has still more recently made a donation of Rs. 1,500 in proof of his appreciating the usefulness of the Institution. The amount is invested in the 4 per cent. Government loan, and the interest, in accordance with the wish expressed by this gentleman, will be appropriated as a prize for the best essay in one of the Vernacular languages on some subject in chemistry or natural philosophy. The prize is to be open for competition to the ex-students of the Institution as well as to the students of the day.

Fees.

44. The amount of fees received during the year terminating on 30th ultimo was Rs. 13,194, being a larger sum than was ever before received during the same space of time. During the preceding year they amounted to Rs. 12,369.

45. The total number of students at the time of the

Number of Students.

examination was 1,044, viz. 91 in the college department, 596 in the central school, and 357 in the branch schools.

Obligations to Dr. Stevenson and Dosabhai Sorabji Munshi.

46. In concluding our notice of the Institution, we have to record our obligations to the Rev. Dr. Stevenson, and to Dosabhai Sorabji Munshi, for their valuable and kind assistance at the examinations. Dr. Stevenson has ever been ready, year after year, to give assistance on these occasions, and we cannot but regret that his recent departure from India will deprive us of his obliging aid in future.

POONA COLLEGE.

Establishment of Professors on April 30th, 1854.

Principal and Translator	MAJOR CANDY.
Professor of English Literature ..	REV. A. G. FRASER.
Professor of Mathematics and Natural Philosophy	REV. JAMES McDOUGALL.
Assistant Professor of Vernacular Literature.	KRIŠHNA SHASTRI CHIPLUNKAR.
Assistant Professor of Natural Philosophy in the Vernacular ..	KERU LAKSHIMAN CHIPLUNKAR.

Sanscrit Department.

Professor of Rhetoric.....	NARAYAN SHASTRI ABHYANKAR.
Professor of Logic	NARSING ACHARYA OK.
Professor of Grammar	DHOND SHASTRI DENGNEKAR.
Professor of Law.....	NILKANT SHASTRI BHAT.

47. This college, it will be recollected, consists of four departments,—a Vernacular, an English, a Sanscrit, and a Normal. The course of instruction in the Vernacular is such as to give the students a critical knowledge of their mother tongue, and comprises those branches of learning which can be communicated through it. The English department consists of two classes of students, viz. those who wish to study English without combining it with Sanscrit, and those who wish to study it in combination with that language. The Sanscrit department likewise consists of two classes of students, viz. those to whom Sanscrit is the chief object, and those who study it in combination with English. The Normal department is for the special

Nature of the College.

training of a class of students in the art of teaching, so as to qualify them for becoming Vernacular schoolmasters.

Scholarships and Translation Exhibitions.

48. The college funds provide 38 Foundation Scholarships, 20 Normal, and 10 Sanscrit Scholarships. Ten of the former give a monthly stipend of Rs. 6 each, and twenty-eight of Rs. 5. They are allotted to Brahmin boys of good abilities, whose parents cannot afford to pay for their education. These foundation scholars are required to study Sanscrit, the Vernacular, and English. The Normal scholarships, Rs. 5 a month each, are open to all classes of Natives, and are allotted to young men under training as masters for our Vernacular schools. The Sanscrit scholarships, Rs. 5 a month each, are allotted to poor Brahmin youths of good abilities, who are required to study Sanscrit in combination with the Vernacular. These scholarships are founded for the preservation and cultivation of the Sanscrit language. For the great object of promoting the cultivation of the Vernacular language, the college funds also provide four translation exhibitions, of Rs. 40 a month each. They are awarded after examination and public competition. The qualifications required are a critical knowledge both of English and Maráthi, a competent knowledge of Sanscrit, and ability to translate from English into Maráthi correctly and idiomatically. These exhibitioners employ part of each day in teaching, and the remainder of their time in the work of translation.

Satisfactory state of College.

49. We are happy in being able to state that we have abundant proof of the college being in a very satisfactory state. It is making its way in the most favourable manner, and we every year become more convinced that it

is destined to exert a most important influence throughout the Deccan. It is presided over by a Principal who, happily, takes the deepest interest in the Vernacular department. It has an accomplished professor of English Literature, an experienced professor of Mathematics, and two intelligent Native professors of literature and natural philosophy through the medium of Maráthi. It has also an efficient body of professors in Sanscrit.

50. The annual examination took place in December. On its conclusion the Principal prepared his report, which was laid before us in January. As the college, in its reformed state, has now existed three years, and is every day proving its claim to greater consideration, we thought it desirable to print the report entire, in the same manner as with the annual reports of the Elphinstone Institution and Grant Medical College, and we beg to submit a copy in the appendix. The general arrangement of the report and its division of subjects will be found in the table of contents. It includes separate reports by the different professors and assistant professors in the English and Vernacular departments on the subjects of their respective classes, as well as the written examination questions, specimens of answering in the English department, and tables giving the general results of the examination. The nature and extent of the examination may thus be seen in the questions of the professors, and the result in the tables and specimens of answers. We have not included the papers in the Normal department, for although they were equally satisfactory with the English, they were much too bulky for printing.

Principal's Report.

51. The report contains so full a detail of the state of the classes in every department of the college, that it seems

Vernacular and Normal departments.

scarcely necessary to enter here into any particulars. It shows that Major Candy continues to take the same deep interest in the Vernacular department which has always characterized him. We have ever regarded this as a circumstance of the highest importance, and we are now more than ever desirous that deep attention to the Vernacular shall always be a distinguishing feature of the college; for, as a consequence of the recent increase to the annual grant, it will become necessary to augment the number of students in the Normal department of the college, that we may be able to supply the increased demand which, we trust, will arise for teachers for new Vernacular schools. It is therefore with peculiar satisfaction that we find the Vernacular and Normal departments in a most efficient state, and it gives us great pleasure to observe that Major Candy's exertions in these departments have been ably seconded by the two assistant professors, Krishna Shástri and Keru Lakshimán, who take great interest in their work. It will be recollected that the latter was formerly one of Mr. Orlebar's earliest and best mathematical pupils in the Elphinstone Institution.

English department.

52. In our last report we mentioned the recent appointment of the Rev. A. G. Fraser as professor of English Literature, in succession to Mr. Green, whose resignation we had to regret; and we are happy in being able to state that Mr. Fraser has well sustained the interests of the college, even though succeeding to a post which had been occupied by so able and successful a teacher as his predecessor. We also mentioned that the English composition of most of the students in the junior college class was unsatisfactory, and that Professor Fraser had engaged to pay particular attention to this point. This he has done

throughout the year, and with great benefit. The majority of the students show considerable improvement in composition. It will be observed in Mr. Fraser's report, that in selecting the authors to be read for lessons in literature, his choice was directed by a desire to carry on, along with the mental, other constituent parts of education: "the social, which regulates the affections and manners, and the moral, which teaches duty in order to make us good." In addition to the duties of his professorship, Mr. Fraser formed a voluntary class in chemistry, and we fully appreciate the zeal which induced him thus to undertake this additional labour.

Mathematical department.

53. It will be seen by the report on the mathematical department that the junior college class has completed a course of instruction, embracing geometry of planes, spherical geometry, spherical trigonometry, practical astronomy, analytical geometry of two and three dimensions, and the elements of the differential calculus. The senior class have gone through nearly the whole of Young's Mechanics, and have had their attention successively directed to hydrostatics, hydraulics, and pneumatics; and in all these branches of natural philosophy very creditable progress has been made. We are happy to notice that Mr. McDougall has formed a class of the assistant teachers for an hour's instruction daily; and as the mechanical method by which they teach arithmetic and mathematics is unsatisfactory, he proposes to commence the class with DeMorgan's arithmetic and algebra,—works, which he thinks, and doubtless with great justice, contain more of the philosophy of the science of numbers than any he is acquainted with.

Number of Students.

54. The following table willl show the number of stipendiary, paying, and free students in the college at the

close of March, exclusive of 118 boys in the Branch English School :—

No.	Departments.	Stipendiary.	Paying.	Free Students	Total number in each Department.
1	Sanscrit department ..	10	6	103	119
2	English ditto ..	38	132	167	337
3	Normal ditto ..	20	...	...	20
	Total..	68	138	270	476

ENGLISH SCHOOLS IN THE DISTRICTS.

55. The English schools in the districts are now ten in number; viz. at Surat, Rutnagiri, Ahmedabad, Ahmednuggur, Dharwar, Broach, Tanna, Sattara, Rajkote, and Dhoolia; and we have arranged our reports on these schools according to the successive dates of their establishment, commencing with that at Surat, which is the oldest we have. The schools at Rajkote and Dhoolia were established during the year under review. The total number of students in these ten schools at the close of March last was 1,078.

Surat English School.

Established 1842.

Master ..... Mr. Graham.

Senior Assistant Master .... Mohanlál Ranchodás.

Eight other Assistant Masters.

Pupils..... 365.

56. This school continues under the able management

of Mr. Graham, who has had charge of it since February 1850. There have been several changes, however, among the other teachers. Mr. Curtis, the second master, has been transferred to the charge of the English school at Ahmedabad, in consequence of the vacancy caused by the nomination of Bhogilál Pranwulubdás to be master of the English school at Rajkote and Superintendent of the Vernacular schools in Katiawar. This removal rendered it necessary to select an able man to supply the place of Mr. Curtis in the second class. We therefore nominated Mohanlál Ranchodás, one of the best Native teachers in the Elphinstone Institution, on a salary of Rs. 80. Motirám Narbairám remained in his former position as teacher of the third class, on a salary of Rs. 50. The united salaries of the next six teachers we considered it advisable to increase from Rs. 90 a month to Rs. 120, viz. two on Rs. 25 each, two on Rs. 20 each, and two on Rs. 15 each. Before making this increase, however, we thought it right to test their qualifications by a careful and searching examination; and in anticipation of these changes, we had some months previously urged them to continue their private studies, warning them that they would get no promotion without being previously subjected to examination. We therefore called upon Mr. Graham to submit them to this ordeal in October and to report the result, classifying the six teachers in the order of merit, with the view of allotting the salaries in accordance with the relative results, provided their previous conduct as teachers had given satisfaction.

57. Mr. Graham conducted the examination with much care, and forwarded to us papers containing the questions given, the values assigned, and the number of marks obtained on each subject by the different candidates, as

well as specimens of answering. The result was exceedingly satisfactory, and proved to us that the character and extent of their individual acquirements entitled them to the increase of salary. As the examination in no way interferes with the business of the school, it is to be repeated in October, so as to give the teachers another opportunity of measuring their strength against each other. In the meantime only temporary arrangements are made with regard to relative rank and pay. The result of the examination placed the teachers as follows:—

1st order ..	Edalji Manjibhái.
	Parvatishankar Manishankar.
2nd order ..	Otamrám Crushnarám.
	Pránnáráyan Mayáshankar.
3rd order ..	Phirozshá Nasserwánji.
	Dhunjibhái Dorábji.

It seems worthy of being mentioned, that the four first on the list came out of the examination in the same order as that in which they were originally selected and placed by Mr. Green several years ago as monitors. Mr. Green's estimate of their relative abilities and acquirements, therefore, must have been singularly correct; or the teachers themselves must have been very assiduous in study to have been able to maintain their respective places against competition. The two last were more recently selected. We have lately lost the services of Edalji Manjibhái, first on the list. He resigned his appointment in consequence of having been selected for the post of master of the Parsee Punchayet English school at Surat. He was always an intelligent and industrious teacher, and we feel confident he will do credit to the selection.

58. The school was carefully examined by Professor Harkness in November, and his report shows that the

school is in excellent condition, and does great credit to all the teachers. He found the number of pupils on the roll 393, and of these 353 were present at examination. This is a larger number than at any previous time. The pupils are divided into ten classes for English and general knowledge, and into the same number for arithmetic and mathematics. These are taught by the head master and nine assistants. Each class was examined in succession.

59. The 1st or highest class, taught by Mr. Graham, contained 30 pupils. Their studies in English had comprised the whole of McCulloch's Course of Reading, grammar, portions of Goldsmith's History of England, Murray's India, general geography, with a collection of introductory problems on the terrestrial globe, and political economy. In all these subjects the pupils acquitted themselves satisfactorily. In history, the subject selected was the reign of Aurangzebe, and in this, as well as on a variety of points in political economy, the answering was highly creditable. The etymology of words, and the meaning of prefixes and affixes, were also accurately explained. In mathematics, Mr. Graham's class is divided into three divisions. The studies of the 1st division comprised Young's Differential Calculus to the end of maxima and minima; Young's Analytical Geometry— straight line, circle, ellipse, hyperbola, and parabola; Hart's Mechanics, to the end of parallel forces; spherical trigonometry with some of its applications. 2nd division—Young's Algebra to the end of logarithms; Chambers' Plane Geometry, six books, with exercises; conic sections, ellipse, hyperbola, and parabola, *geometrically*, from Rutherford's Course; plane and spherical trigonometry, with their practical applications. 3rd division, algebra to the end of quadratic equations; Chambers' Plane Geometry, six books; Young's

Plane Trigonometry. Each division was examined partly by written questions, and partly *vivâ voce*, and the questions set to the 1st division were solved by a great majority of the class. Mr. Harkness, in concluding his remarks on this class, says:—"This will be sufficient to show that mathematical science is successfully cultivated, and that its practical applications have been carefully attended to. It will be observed that conic sections are taught *in the first instance geometrically*,—a plan which I consider most judicious, both as calculated to ensure a more thorough comprehension of the principles, and as being at the same time a mental exercise of a higher order. This remark applies only to the *introduction* to the study."

60. The 2nd class, taught chiefly by Mr. Curtis, contained 34 pupils. Their studies in English have comprised portions of McCulloch's Course of Reading, Murray's British India, and Goldsmith's History of England. The result, upon the whole, was satisfactory. In the history of India, in particular, the pupils were exceedingly well prepared. In mathematics the studies had comprised six books of Euclid, with exercises, quadratic equations, and plane trigonometry. The class acquitted themselves very creditably. "Of two quadratics proposed to the 1st division, correct solutions were given by all but one, each time. The geometrical problems seemed to be understood by all. Some of the boys had a difficulty in expressing themselves in English, but on resorting to Gujaráti, they demonstrated the propositions satisfactorily."

61. The result of the examination of the other classes was, upon the whole, satisfactory. There were exceptions, however, in one or two of the classes, in which the appearance was not so creditable. Mr. Harkness, however, remarks:—"It is probable, too, that the boys acquitted

themselves at the examination considerably worse than usual, as the bad effects of the *habit of precipitancy* would be brought out more conspicuously by the love of display, with which it is not unfrequently accompanied, and which would naturally be excited by the occasion."

RUTNAGIRI ENGLISH SCHOOL.

Established 1845.

Master..... RÁMCHANDRA DINÁNÁTHJI.

Pupils..... 45.

62. No change has taken place in the management of this school since the nomination of the present master in 1847. It is divided into two departments, the English and mathematical, both containing five classes. The English studies of the 1st class during the year comprised grammar, etymology, and portions of McCulloch's Course of Reading, Chambers' British Empire, Marshman's History of India, Murray's History of India, and Chambers' Geography and Natural Philosophy, with exercises in translation from Maráthi into English. In mathematics the class had studied the first four books of Euclid, and algebra to quadratic equations. The school was subjected to a careful examination on four successive days, in February, by Mr. Baker, Superintendent of Schools in the 3rd Division, and the result was creditable both to master and pupils, comparison with the results obtained at the examination the previous year showing a decided improvement. As we mentioned in our two last reports that we were not quite satisfied with the work of translation, it gives us pleasure on the present occasion to state that this important subject has been more generally as well as more successfully

taught. Geography, however, has not been equally well attended to. The Superintendent was decidedly of opinion that upon the whole the present state of the school is an improved one. At the public examination on February 10th, the European and Native officials were nearly all present, as well as most of the influential Natives, and they all commended the exertions of the master, and expressed their satisfaction with the state of the school. Mr. Coles, the Collector, kindly presided on the occasion; and in Mr. Tucker, the Senior Assistant Judge, the inhabitants are most fortunate in having among them a gentleman who has long taken the deepest interest in education. In Dr. Maitland, the committee have been deprived of the services of a Secretary, who for several years took much interest in the well-being of the school.

Ahmedabad English School.

Established 1846.

Master.....Mr. Curtis.
Assistant Master..... Máhádavrao Narsing.
Pupils..... 162.

63. At the time of our last report the master of this school was Bhogilál Pranwulubdás; but on his being selected for the appointment of master of the English school recently established at Rajkote, and Superintendent of the Vernacular schools in the province of Katiawar, Mr. Curtis was nominated to succeed him. Bhogilál Pranwulubdás left Ahmedabad to assume charge of his new duties in August, and from that date the school remained in charge of the assistant master till Mr. Curtis joined in November. The number of pupils is increasing. In our

last report the number mentioned was 125. At the time of the examination there were 177. At the close of March, however, this number had fallen to 162. The school was carefully examined in January by Mr. Graham, Superintendent of Schools in the 2nd Division, and the result was tolerably satisfactory. It is divided into eight classes, the highest containing twenty-nine boys, the lowest twenty-five. The English studies of the highest class during the year comprised portions of Murray's History of British India, McCulloch's Course of Reading, Clift's Political Economy, grammar, geography, and etymologies. The mathematical studies were six books of Euclid, algebra as far as quadratic equations, and plane and spherical trigonometry.

64. The Superintendent makes the following remarks on the 1st or highest class:—"The upper half of this class is composed of some of the best and some of the worst men who were in it last year, and the lower half almost entirely of such as have been admitted into it from the 2nd class since that time, and who do not appear to have profitted much by their promotion. In order to produce a class, composed of boys so disproportioned in regard to attainments as this one is, in a presentable state at an annual examination, it must have enjoyed throughout the year the uninterrupted assistance of a teacher in whom patience, industry, experience, and skill were all combined. This privilege was denied to the class in question, as the teaching of both the 1st and 2nd classes, in addition to the general management of the school, devolved upon the assistant master, Máhádavrao, during the interval that elapsed between Bhogilál's departure for Katiawar on the 20th August last, and Mr. Curtis' arrival in Ahmedabad in the middle of November following. Besides, a succession of teachers is not usually favourable to the progress

which a class, constituted as this one is, should make within the course of a year, as each in his turn must make himself acquainted with the capacities and acquirements of the different members of the class before he can exactly accommodate his instructions to their respective wants. As a whole, therefore, the class fell considerably short of what might have been expected from it under more favourable circumstances; yet some of the upper boys (who figured so well at last year's examination) though nearly the whole of their time had, of necessity, been occupied as teachers during the period Máhádavrao had charge of the school, made a very respectable appearance this year again, especially in geography, Latin and Greek etymologies, Indian history, and mathematics. Their answering in McCulloch's Course of Reading and Clift's Political Economy did them less credit."

65. The 2nd class, Mr. Graham remarks, "has had the full benefit of Máhádavrao's teaching during the year, with the exception of the interruption already noticed, when he was able to bestow upon it only a very partial attention. The parsing and explanations of passages from the Series of Lessons were in the majority of cases good, but some boys had to be occasionally allowed the free use of the Vernacular before they could make themselves distinctly understood. In Green's Phrases, and the 2nd part of Marshman's History of India, the answering was flippant, and the failures few, even towards the lower end of the class. In mathematics they have read elementary algebra as far as quadratic equations with the usual success, and made up very carefully all the problems and theorems of the 1st book of Euclid. Simple deducibles have not yet attracted their attention, but are to be introduced immediately. I quite agree with Mr. Curtis in the belief that the English acquirements of several boys in this class are

equal to those of the boys composing the second half of the 1st class. Indeed, the numbers in this latter class might be increased to 40 from the 2nd class, without augmenting the difficulties with which the master will in any case have to contend in teaching it."

66. The remaining classes are taught by monitors. Mr. Graham remarks, "that the improved state of the numbers, and the progressive character of the studies in the different classes, are considerations equally favourable to all the parties who have in succession directed the operations of the school since last examination, and now that the school has become subject to European control, its continuous prosperity in future may, I am inclined to think, be looked forward to as matter of certainty."

Ahmednuggur English School.

Established 1848.

Master..... Mr. A. J. da Silva.
Pupils .... 63.

67. No change has taken place in the management of this school since it was first established. In March it was carefully examined by the Superintendent of Schools in the 1st Division, and the result was satisfactory. This was attributed by the Superintendent to the zeal and assiduity of the master, and to the vigilant and judicious superintendence of the local committee.

68. The school is divided into six classes for English studies, and into five for mathematics. The English studies of the 1st or senior class comprise portions of McCulloch's Course of Reading, Clift's Political Economy, Chambers' History of the British Empire, Taylor's Ancient History,

Latin roots and derivations, composition, and general geography. The answering on these subjects afforded much satisfaction. The mathematical examinations of the class were also satisfactory. The only defect noticed in this class by the Superintendent was that some of the boys could not give idiomatical translations of what they read. The general result of the examination of the other classes was also favourable. The public examination was held in the Adálat on 28th March, and was attended by a considerable number of European and Native gentlemen of the station. Mr. Woodcock, who has for several years taken much interest in the school, was kind enough to preside and distribute the prizes.

Dharwar English School.

Established 1848.

Master..... Govind Laximon.
Pupils ..... 47.

69. In our two last reports we were compelled to express dissatisfaction with the state of this school. As the inhabitants, however, defray a considerable part of the expense incurred in supporting it, we considered them entitled to much consideration. We therefore decided on giving it a further trial, and on placing it under the management of a new master. We accordingly, on the recommendation of the Principal of the Poona College, appointed Govind Laximon, the senior assistant teacher in the college, to the situation. He bore the character of being a good mathematician, and a man of great steadiness of character and correctness of conduct. Great confidence may therefore be placed in him, that he will perform his

duty diligently, and we trust he will succeed in retrieving the character of the school. He joined his appointment in January. In March the school was examined by Mr. Baker, Superintendent of Schools in the 3rd Division. He found the classes in much the same stages of advancement as in the previous year, but they appeared already to be in a somewhat better state of discipline, and they included twenty-five boys who did not belong to it when last examined. The Superintendent says:—"The present master has so very recently taken charge of the establishment, that I am incompetent as yet to speak with any precision about him. He appears, as far as I could discover in one visit, to be a zealous teacher, and to have already made a favourable impression in the place. He takes also a lively interest in a girls' school which has been recently established there, and these points argue well in his favour. I pointed out to the master whatever I saw wanting to make the studies of the school profitable; and strongly urged upon him the advantages of giving a proper solidity to the basement of his teaching. For the next five or six months I shall be a frequent visitor at Dharwar to look after my schools there, and this one will on these occasions be anxiously inspected."

Broach English School.

Established 1849.

Master.....Kávasji Edalji.
Pupils ..... 65.

70. No change has taken place in the management of this school since it was first established. It was carefully examined in December by Mr. Graham, Superintendent of

Schools 2nd Division. He found a diminution in the number of pupils to the extent of sixteen, as compared with the previous year, and he was unable to account for this. The classes, in consequence, had been reduced from five to four ; the highest containing twenty-five boys, the lowest fifteen. With the exception of the disagreeable feature of diminished numbers, we have no reason to be dissatisfied with the state of the school.

71. In our last report we mentioned the studies of the 1st class, both in English and mathematics. These we need not repeat, as the subjects prepared by this class for the year's examination very much resembled, both in character and extent, those in which the same class was examined the preceding year. The changes to which the composition of a class may be subject in the course of a year, in consequence of the withdrawal of pupils from the school, very often render a simplification of studies unavoidable, so as to meet the wants of the new comers, and satisfactorily account for a class being found in nearly the same condition at two consecutive annual examinations. In the course of his report on the school, Mr. Graham makes the following remarks :—" The answering, both in the Course of Reading and in history, was of a generally intelligent character throughout the class. Several of the boys, indeed, particularly in the histories, answered nearly all the questions that were given, and in so off-hand and ready a manner as indicated a degree of familiarity with the subject equally creditable to their own industry, and to the skill of their teacher. In mathematics, also, the accuracy with which some of the more intricate analytical formulæ of plane trigonometry were investigated, and modified so as to become adapted to logarithmic computation, was equally gratifying, as of course it should have

been, this being the only mathematical subject to which the attention of the class had been directed during the year. Should an examiner, however, make it his business to find fault with a school, which is seldom a difficult thing to do, he might, perhaps, object to the extent to which Kávasji avails himself of the Vernacular in communicating his instructions to, and receiving his explanations from, his highest classes, as it lessens their opportunities of practising speaking the English language. But conformity with the principle of facilitating the pupil's progress, by removing, or at least smoothing down, the greater difficulties that may obstruct his way, would sanction this practice, and make it objectionable only when it appeared to proceed from a disposition on the part of the teacher to suit matters to his own ease and convenience, rather than from a desire to adopt whatever medium of communication might seem most calculated to promote the objects and interests of his pupils—a charge to which I do not consider Kávasji liable. The 2nd, 3rd, and 4th classes are chiefly taught by the monitors, being subject to frequent examinations by the master himself, and are all in a more or less satisfactory state, according to their different standings and periods of study."

TANNA ENGLISH SCHOOL.

Established 1851.

Master..... JAHÁNGIR HORMAZJI.

Pupils..... 99.

72. No change has taken place in the management of this school since its establishment in 1851. In our last report we mentioned that we were not quite satisfied with the manner in which it had been conducted, as the master

had been pushing his classes forward without due regard to the necessity of grounding them thoroughly on a sound elementary basis. It became evident that the rudiments of grammar and geography had been hurried over with imperfect attention, and that the translations from Maráthi into English were in consequence defective. We adopted such measures as seemed necessary for correcting this state of matters, and we are happy to say that great improvement has taken place. In December the school was subjected to a careful examination by Mr. Baker, Superintendent of Schools in the 3rd Division, and the result was very satisfactory. The studies are divided into two divisions, one for English grammar, geography, history, and translation from Maráthi into English; the other for mathematics. Each division contains six classes. The number of boys present at the examination was 87. Mr. Baker says:—"A very marked improvement appears to have been made during the last year in English grammar and geography, and these subjects seem now to be attended to with much carefulness, both by the master and his pupils. The writing, also, of the school, has much improved. The information of the pupils on other subjects is becoming more solid and useful. The reading of the classes, as was the case last year, is remarkable for correctness of pronunciation."

73. At the distribution of prizes, Mr. Keays the Judge, Mr. Rose the Collector, and other European gentlemen were present, as well as the most influential portion of the Native community, and all seemed to concur in commending the diligence of the master.

Sattara English School.

Established 1852.

Master.....Vishnu Moreshwar Bhire.

Pupils ..... 100.

74. In our last report we mentioned the circumstances which led to the establishment of this school in December 1852. It remains in charge of the same master. For the purpose of ensuring, as far as possible, its efficient management and control, the Commissioner, at our request, formed a local committee, consisting of himself, the First Assistant Commissioner, the Civil Surgeon, Rao Bahadoor Principal Ameen, Untajee Narayan Mootalik Jaghirdar, Keshavrao Krishna a Government pensioner, and Nanabhai an intelligent writer in the Commissioner's office, who was educated in the Government English school at Surat, the latter being also secretary to the committee. We have reason to believe that the school is in every respect going on well, and on the testimony of the Commissioner we are enabled to say that the progress and attendance of the scholars are very satisfactory. The secretary to the committee has also stated that the inhabitants of Sattara appear to be sensible of the benefits of education, and that every month brings an increase to the number of pupils. At the date of our last report, the number of boys was 75; this number has now increased to 100. The school was carefully examined in October by the Superintendent of Schools in the 1st Division, and the result was very satisfactory. The number of boys on the register at that time was 107, and of these 99 were present. The school is divided into five classes, both for English and for

mathematics. The English studies of the senior class, consisting of twenty boys, had comprised portions of McCulloch's Course of Reading, British Empire, grammar, general geography, and translation from English into Maráthi. The Superintendent states that the "readiness and accuracy with which the boys, particularly of the two senior classes, under the immediate tuition of the head master, answered the different questions put to them in history, geography, grammar, and arithmetic, were highly creditable both to the master and pupils. The circumstance which pleased me most was, that the senior boys translated their lessons from English into Maráthi with an ease and correctness that showed that the boys perfectly understood what they had learnt, and they likewise gave the meaning of separate Maráthi words in English, and of English in Maráthi, most accurately." The Superintendent further states that great praise is due to Vishnu Pant for raising the school in so short a period to its present satisfactory condition. A public examination of this, as well as of the Vernacular schools, was held in the Adálat on the 8th of October, in the presence of Mr. Ogilvy, the Commissioner, who kindly distributed the prizes which had been awarded.

75. In the course of the year, the school was also visited by our President, who passed a day at Sattara on purpose. He was accompanied by Mr. Burgess and Mr. Wood, two American Missionaries. Mr. Burgess was kind enough to examine the school, and expressed himself satisfied. Mr. Warden, also, was much pleased, and particularly with the evidence which was afforded of the same pains having been taken with the lowest as with the highest class. All the boys seemed to understand what they read and were talking about.

Rajkote English School.

Established 1853.

Master..... Bhogilál Pranwuluddás.

Pupils..... 55.

76. Having in a previous part of our report mentioned particulars connected with the establishment of this school, we have but little add in this place. It was opened on 17th October, the number of boys admitted that day being 36. This number increased in March to 55. We have reason to believe the school to be going on well, and we hope in our next report to be able to give a satisfactory account of its working.

Dhoolia English School.

Established 1853.

Master..... Náráyan Balál.

Pupils..... 77.

77. Having in a former part of our report mentioned the circumstances which led to the recent establishment of this school, we have but little to add in this place. The school was opened in November last by Náráyan Balál, who had been selected as master. In January it was examined by the Superintendent of Schools in the 1st Division. He found 82 boys present at the examination. Their progress was quite equal to what could have been expected in so short a time, and the Superintendent was well satisfied with the exertions and general management of the master. The Revenue Commissioner was kind enough to preside at the examination, and he expressed his satisfaction at the

progress which had been made, and considered the result creditable to the teacher. We hope in our next report to be able to give a satisfactory account of its further working.

GOVERNMENT VERNACULAR SCHOOLS AT THE PRESIDENCY.

78. These schools are seven in number, viz. four Maráthi, two Gujeráti, and one Hindustáni. The total number of pupils at the annual examination in December was 474. The schools remain under the superintendence of Mr. Harkness, by whom they were very carefully examined towards the close of the year. With the exception of a small Maráthi school, they were in a satisfactory state.

79. We have more than once expressed our opinion that the aid of Government might safely be dispensed with in imparting what is strictly called *primary instruction* at the Presidency. Our Vernacular schools find pupils merely because we insist on a certain proficiency in the Vernaculars as a qualification for admission into the Elphinstone Institution; and so great has become the eagerness for admission, that the amount of proficiency required might no doubt be safely left to private enterprise. Notwithstanding this opinion, however, we have refrained from closing these schools, for we ascertained that so great and sudden a change would be very distasteful to the bulk of the Native community; and in deference to their wishes and feelings we decided on retaining them. It was then proposed to place them on a different footing by incorporating them with the branch English schools, each of which would then consist of an English and Vernacular department. It has been found impracticable, however, to carry

out this plan to the full extent we intended. The schools, therefore, remain on their original footing, and will probably continue so till the time arrives for leaving preliminary Vernacular instruction in the hands of private teachers. Events are already taking place which will gradually lead to this. Several private preparatory schools have lately sprung up. One or two are Maráthi, but most of them are Gujeráti, all the masters and a great majority of the pupils being Parsis. The following statement by Mr. Harkness shows that the great object in resorting to Vernacular schools is to make them a stepping-stone to the Elphinstone Institution. He says :—" An agreement is generally entered into between the master and parents, that a certain sum of money shall be paid to the master on the pupil's passing the examination for admission into the Elphinstone Institution. I have no means of ascertaining the average length of time they are under instruction, but it seems to be the general impression that it is considerably shorter than in the Government schools, though this has been considerably reduced of late. Consequently, this mode is generally adopted by those who are able and willing to pay the requisite amount."

VERNACULAR SCHOOLS IN THE DISTRICTS.

80. These schools, with the exception of those in Katiawar, are arranged in three divisions. The 1st division comprises the schools in the collectorates of Poona, Ahmednuggur, Khandesh, and Sholapoor, and in the province of Sattara. The 2nd division includes the schools in the collectorates of Surat, Broach, Kaira, and Ahmedabad; the 3rd division those in the collectorates of Tanna,

Rutnagiri, Belgaum, and Dharwar. In the appendix will be found a return of the number of these schools in each division—when and where established—estimated population of the town or village—number of pupils, both as borne on the register, and as actually present at the examination—name, caste, and salary of the master—length of his service—date of examination—and brief remarks on the state of each school. Each division is provided with a Superintendent, who annually inspects every school it contains. Thus all our schools are subjected to that vigilant control so essentially necessary for keeping them in an efficient state. The total number of scholars in these schools at the close of March was 14,832.

First Division.

81. This division remains under the superintendence of Máhádeo Govind Shástri, who was selected for this appointment in April 1852. He continues to perform his duty with earnestness and zeal. During the year under review he visited and carefully examined 130 schools, including 59 village schools in the Purandhar districts of the Poona collectorate. He has been engaged in travelling through his extensive division nearly the whole year. He has recently submitted his annual report, containing minute details on the state and progress of the schools, as ascertained by personal inspection. The general result of his examinations was very satisfactory. There was not only a considerable increase in the number of boys, but also a marked improvement in the acquirements of the majority. The Superintendent says, that while a gradual improvement was perceptible in all the schools, there was still greater progress in the best than during the preceding year.

82. In our last report we mentioned the measures we had adopted for removing the most incompetent of the teachers, and for supplying their places with well qualified men. In every instance in which this step has been taken, the result has been most beneficial. Thus the schools at Malligaum, Juneer, Násik, Indapur, Nos. 1 and 3 at Ahmednuggur, and No. 1 at Poona, are in a far better state than they ever were before, and with those at Dhoolia, Akoleh, Zaikera, and Puntambe, are some of the best in the division. The largest school is the one at Násik, which contains 257 boys. It is also admirably managed by Laximon Narsing, the master. The Superintendent says:—"The boys of the 1st division of the 1st class read correctly and distinctly, and gave very satisfactory explanations of what was read. Great proficiency was attained by the boys in grammar, geography, and Maráthi history, and their knowledge of algebra and geometry, in which they had gone as far as quadratic equations, and 60 propositions of Hutton, was such as to show both care and skill on the part of the head master, Laximon Joshi, whose zeal and diligence led the Board to promote him from the assistant mastership to mastership in the month of August last. Their penmanship and dictation were also good. The boys of the 2nd and 3rd divisions of the 1st class, taught by Rámji Náráyan Shástri, whom I had the pleasure of appointing as assistant in the place of Laximon Joshi, passed a very searching examination in almost all the branches taught. Ráoji Shástri was a stipendiary student in the normal department of the Poona College, but his health not being equal to complete the whole course of that department, he was obliged to resign his scholarship, and take an assistant mastership in this school. He is a talented and very intelligent young man, and seems to have his heart in his

work. The classes, which are taught by monitors, not only showed that they understood their respective lessons correctly, but answered to my astonishment almost every question that was asked in connection with the signification of words and sentences. They also displayed much skill in mental arithmetic. There are two classes learning English. The 1st class, which contains 11 boys, has finished the whole of Second Reading. They read fairly, with the exception of two boys at the bottom of the class, and can give correct translations of what they have learnt. The 2nd class boys, 30 in number, have read a few pages of the First Reading, and can give the English words for almost all the members of the body. This class is taught by Krishnáji Rámchandra, recently appointed by me as monitor in this school. He is a young man full of zeal and energy, and seems to take much pains to improve his scholars. Everything, in fact, about this school, is indicative of a right spirit in education. The admirable discipline, the selection of books, arrangement of classes, adoption of new and improved methods, and constant and active supervision on the part of the head master, all conspire to raise the character and efficiency of this excellent institution."

83. The school at Malligaum contains 129 boys, and is in a very efficient state. The Superintendent says:— "This well built school is in a very hopeful condition, and does great credit to its able and diligent master, Bálcrishna Bábji, who seems to take a lively interest in the improvement of his pupils. The number of boys in the school at my last visit was 83, which has now increased to 129. The boys of all the classes looked very happy, and seemed to love their studies. The reading and explanation of the first three classes were good, and the answers returned by the boys of the first two classes in Dádobá's grammar

were indeed surprising. In algebra and geometry the first class boys sustained a pretty close examination, and a circumstance which pleased me much was that the little boys of the lower classes displayed much skill in mental arithmetic. In the first class there is a blind boy, of the name of Laximon Rámchandra, who can multiply nine or ten figures above and below, and can work examples in algebra. There are fifteen boys in this school learning English. They have finished McCulloch's First Reading Book, which they read tolerably well for the time."

84. Of the school at Juneer, the Superintendent says: —"Excellent order is preserved throughout the school, without any undue severity. The boys in the first two classes read and explained remarkably well, worked sums in algebra correctly, were well grounded in grammar, and showed intimate acquaintance with the maps of Asia, Europe, and Africa. Their answers in history were both correct and ready, and they were taught the first two chapters of Conversations on Natural Philosophy with the utmost care. The other classes also showed some advancement in their respective studies, and the boys of the 6th class afforded me the highest satisfaction, by returning very pleasing and intelligent answers to almost all the questions put to them at the time of examination. The good tone, the proper discipline, and the most efficient instruction in this school, speak very powerfully in praise of the honest ability of the master, Náro Bálcrishna, who is a young man of unaffected intelligence and energy, and knows very well how to move and govern the minds of his pupils. In addition to their Maráthi studies, the 1st class boys have learned 40 pages of Rudiments of Knowledge in English, which they read tolerably well, and translated correctly. They have also learned 20 pages of

Reid's Grammar, and can well distinguish the parts of speech."

85. In the course of his tour the Superintendent visited the recently established schools in the Sattara province, and he says :—" I did not confine my attention to the mere examination of the schools (then in existence) at Wai and Sattara, but endeavoured to diffuse among the people a knowledge of the new educational plan which the Board have adopted in establishing schools in that territory, and to explain the advantages to be derived from such a plan. In my conversations with the people I was very sorry to find that a majority of them entertained very wrong notions regarding the important subject of education, and consequently could not readily comprehend the great assistance which the Board have kindly agreed to give them, in supplying their schools with better teachers. The prevailing notion is that 'anybody can be a schoolmaster.' As this notion is highly prejudicial to the self-supporting system, I took great pains to correct it, and to convince the people that the art of teaching is the most important and most difficult of all arts. When I directed their attention to the various capacities, tastes, and tempers of their children collected in a school, and made them feel that the object of the school is not only to instruct the children in various branches of knowledge, but to repress bad passions, and at the same time to develope the better feelings of the heart, they themselves acknowledged that to effect all this great skill is required, and that an inexperienced man, who has not learnt the art of teaching, will never be able to manage a school properly. After I saw them convinced of the fact, I tried to make them sensible of the benefits which the Board are conferring upon them by supplying their schools with good teachers, upon whom

the whole success of schools depends, and of the great expense they undergo for keeping up the normal class for training them. How far I have succeeded in gaining my object will appear from the manner in which the requirements of the Board's new regulations have been complied with by the inhabitants of Wai, Bijapúr, Pandharpúr, Kurar and Sattara, and from the number of fresh applications that been lately received for new schools."

86. The total number of boys in the Vernacular schools in this division, at the time the Superintendent sent in his report, was 6,531, including 1,757 in the village schools of the Purandhar districts of the Poona collectorate. This number shows a very considerable increase on the previous year.

Second Division.

87. This division, embracing the schools in the collectorates of Surat, Broach, Kaira and Ahmedabad, continues under the able superintendence of Mr. Graham, who was nominated to this duty in June 1850. During the past season he made his annual tour of inspection, and he has since forwarded a valuable report, embodying minute particulars on the state of each school, as ascertained from personal examination. The general result was exceedingly satisfactory. There is, indeed, a very marked improvement in the state of these schools, and we attribute the change to the gradual nomination of better teachers, and to the vigilant superintendence of Mr. Graham.

88. The best schools in the division are those at Surat, Nos. 1, 3, and 4; those at Nadiad, Kaira and Kapadvanj; Nos. 1 and 4 at Ahmedabad, and the schools at Danduka and Mehmedabad. The worst are the schools at Orpad

and Anklesar. The largest is the one at Nariad, containing at the time of examination 277 boys. No. 1 at Ahmedabad has also a large number, 240. The former is the largest Vernacular school we have, excepting No. 2 at Rutnagiri, which has 285 boys.

89. The following remarks by the Superintendent on the attainments of the higher classes in the school No. 4 at Ahmedabad under Lálbhái Ruprám, whom we have in previous reports mentioned as one of our most industrious and able masters, will show the extent to which instruction is carried in one of our best schools :—"The mathematical and historical courses in the 1st class are both tolerably extensive, the former including the whole of Hutton's Geometry, algebra to quadratic equations inclusive, the solutions of the three cases of plane trigonometry, and a good deal of the mensuration of surfaces and solids ; and the latter Mahomedan India, Máháráshtra, a synopsis of England, and something of the ancient histories of Greece and Persia: this whole course, with grammar, geography, &c. has been taught with considerable judgment and care. In short, the studies and acquirements of the higher classes here would do credit to the higher classes of many English schools."

90. The general character of the masters in this division may be appropriately given in the Superintendent's own words :—"Eight of our masters received the principal part of their education in the normal class, which, while it existed, was connected with the Elphinstone Institution, and of these, six are turning out very valuable teachers—teachers who are labouring with equal zeal and industry in the acquisition of knowledge for themselves, and in its diffusion among their pupils. We have, again, nine masters who have received an English education, but of these only four have as yet had any considerable experience in

teaching. All of them, however, have acquired early habits of reading and thinking, in their connection with the English schools, which may be expected to exercise a beneficial influence on their future career as schoolmasters. Compared with the normal class men, they are in general inferior as Vernacular scholars, but their English scholarship is more than a fair compensation for this inferiority, affording them, as it does, great advantages in the further prosecution of their studies. As their attention, moreover, will now constantly be directed to the Vernacular, they may, in time, rival the normal class men, even in their own element. Of the remaining nineteen masters, eleven are old men, whose greatest merit is to be found in the largeness of their schools, some of them numbering 240 pupils, others 150, 120, and so on. The other eight masters received their education in the *Vernacular* schools themselves, and, with two exceptions, none of them are receiving a higher salary than Rs. 10 a month; and though their early opportunities of instruction have been so unfavourable, some of them appear determined not to suffer themselves to be distanced in the competition for a higher degree of literary distinction than has hitherto prevailed among the schoolmasters of Gujarát, and which is daily growing stronger among all our more modernly educated men. Of these the most successful in their efforts hitherto have been the young men of Ahmedabad No. 3, Matur, Dholka, and Dholera."

91. Mr. Graham has introduced an excellent system of conducting the examination of the schools through the instrumentality of the teachers—a measure which operates successfully in stimulating these teachers in the work of self-improvement. We will describe it in his own words:—
"I have been for a long time endeavouring to introduce

the practice of making every master examine his own classes at these annual examinations, and have to a very desirable extent succeeded, especially with the normal class and English schoolmen. This practice was at first, for other reasons than its novelty, universally unpopular, and it is still so with nearly all the old men, who are strongly opposed to all such innovations, and whom usage itself I fear will not reconcile to it. I know of no plan more effectual than this in compelling the masters to make themselves thoroughly acquainted with all the class books used in their schools—a result most desirable of attainment, as without it the master must always be in a great measure unable to make the lessons sufficiently interesting and intellectual exercises to excite the curiosity of his pupils, the most direct way in all cases of instilling into them habits of thinking and inquiry. The mode, then, in which these examinations are usually conducted, is this, viz. the course read by the highest classes for examination is first ascertained, and different sections from it are selected, on which the Mehtaji is required to examine them without any reference to books whatever, whether the subject be history, biography, lessons on morals, science, &c. interfering myself only occasionally to draw attention to omissions and defects, whether in the questions proposed, or the answers given to them, and recurring to the old system of examination in all cases where the Mehtajis themselves break down in this, to them, trying ordeal. Should the Mehtajis, therefore, dread the consequences of failure in what they know will be expected from them,—as all who have already acquired some reputation, and all who are anxious to acquire some, most certainly will,—they will labour assiduously to fit themselves for the requirements of these annual examinations; and this is all we want from them, as their

assiduity will generally secure their success, as it has already done in the cases of Lálbhái, Ganpatrám, Govindrám, and several others who examined their classes this year before crowded houses in biography, history, grammar, geography, and science, so far as these subjects had been studied, with equal ease and ability."

92. With regard to the improving state of the schools, we beg to quote the following remarks:—"The intellectual progress realized in these schools during the past year, though confined within moderate limits, has been more than usually satisfactory, as I trust has already appeared to the Board from the remarks accompanying the printed forms in which all particulars bearing upon the schools separately, have been fully detailed. It will therefore he sufficient here to add that this improvement consists, not so much in the extensions of the courses of history and science which have really been introduced with advantage into some of our best schools, as it does in the more intelligent method of teaching the courses of former years which is now very generally beginning to prevail, and which was easily recognizable this year from the style in which several of the masters were able to conduct their own *vivâ voce* examinations, as, had they not read up the course industriously beforehand with strict attention to the sense, their attempts at *vivâ voce* questioning without reference to books, on those public days, must have proved total failures. This I consider a very commendable element in the progress alluded to, much more so than a simple extension of the studies, as these might be carried to extravagant lengths, and the teaching still continue to be of the most mechanical description, unless the master belonged to that class of teachers who always aim at making their instructions exercises for the intellects of their pupils."

93. In our last report we mentioned that we had removed several of the incompetent masters in these schools, and that as soon as we could procure the services of a sufficient number of thoroughly qualified men, we intended to carry out completely the late measure we had adopted for getting rid of every man who was not fully equal to his work. We have recently removed the incompetent master at Omreth; but the following remarks by the Superintendent will show that the demand for educated men in various directions has been so great as to render it impossible at present to weed the division as completely as we could wish:—"At present there is no immediate prospect of my being able to find competent successors for the old men who are to be discharged on the receipt of certain stipulated gratuities. These mehtajiships present no attractive points to young men of fair abilities and education, especially as the demand for lads of this description for other more eligible employments is now daily increasing: *e. g.* within the last two years we supplied Colonel Goodfellow with six candidates to form a class in connection with his office, for training assistant surveyors and builders for the public service, who have all lately passed with distinction the examinations required from candidates destined to serve in those departments, and are now attached to different stations in the Presidency, on monthly salaries of Rs. 60 each. Shortly after the establishment of the Colonel's class, we supplied seven teachers for the educational service in Katiawar, of whom five receive Rs. 50, and two Rs. 25 a month each, so that between the surveying and building departments, education in Katiawar, and the junior masterships of our own schools, which are also of very recent establishment, and much valued by those who hold them, (independent of occasional vacancies of minor importance

in other quarters, which we have provided for,) twenty of our pupils have been selected to fill situations, honorable and lucrative in a far higher degree than mehtajiships either are at present, or are likely to become."

94. It is satisfactory to find that the measures adopted for the removal of incompetent teachers, and for the nomination of well qualified successors, is being attended with the benefit we anticipated. In his remarks on the school at Ahmode, for instance, the Superintendent says:—"One feels much more pleasure in examining this school now than formerly, when it was under the management of old Nárbhairám Jayshankar, a man who possessed nothing of the abilities, habits, or inclinations of a teacher. Bhowáninand exercises the understandings as well as the memories of his pupils, so that their studies have become more attractive and interesting to them than they ever could have proved under his predecessor, both because of his neglecting to direct the attention of his classes to the meaning of their lessons, and his inability to explain such difficulties as the more intelligent and inquiring lads of his school occasionally pointed out to him; but though reformation has been successfully commenced, it is far from being complete, and the master has yet to make great exertions before he can bring his school up to that degree of perfection which I expect from him, and that is, to raise it intellectually to a level with the first schools in this division. Nothing less than this can be considered satisfactory from a man who was himself a pupil in the Surat English school for about five or six years, and who both saw, and profited so highly, as Bhowáninand did, from the manner in which operations have always been conducted there."

95. All the newly appointed masters are giving great satisfaction. For instance, in reporting on the school No. 1

at Surat, Mr. Graham says :—" Tripuráshankar Mánishankar assumed charge of this school in March last, in consequence of its former master Durgárám Manchárám having obtained a more lucrative situation in Katiawar. Having on many former occasions spoken highly of Tripuráshankar's merits as a teacher, I gladly avail myself of this opportunity of bringing to the Board's notice a fact which fully and satisfactorily demonstrates the truth of all I have ever said in his behalf, viz. that within the eleven months he has had charge of this school he has secured a larger attendance, by about 51 pupils, than was Durgárám's maximum at any time within the last four or five years. This success reflects the more credit on Tripuráshankar, as from the very day he assumed charge he was deprived of the co-operation of Durgárám's well-qualified and experienced assistant master, who was removed to the Ránder school, and succeeded in his old appointment by a mere school-boy. The contents of the accompanying table show that in other respects the classes have been well attended to, while the admissions into the English school have been 43 ; facts which, when put together, will, I doubt not, convince the Board that this man has well deserved the encouragement which, in the shape of increased pay, he received on his promotion to this appointment."

96. As another instance, we may mention that in his report on the school at Kaira the Superintendent says :— " Ganpatrám Nathurám had been, for some time previous to his appointment to Kaira, master of a Verpacular school at Bhooj, on a salary of Rs. 30 a month ; but the climate of that place not agreeing well with him, and not wishing to remain at so great a distance from his family, he willingly accepted Kaira when it became vacant, notwithstanding the reduced salary, because of its being his own native

place. On leaving Bhooj, the Political Agent there, to whose supervision the school had been subject, gave him a very excellent character, both as an able and politic teacher, not so much because of the admirable improvements he effected in the school while he conducted its operations, as because of the tact he displayed in converting into friends those who had formerly been enemies to the school, on account of the system of instruction pursued in it,— a character which he has, for so far, very fully sustained in connection with his present appointment. He succeeded a very good man here, Laxminárayan, and one who was much liked by the Kaira people ; but notwithstanding this, there has been an increase of 43 pupils during the ten months he has now been in possession; and I should not be greatly surprised, from what I have seen of the man, if, in ten months more, his pupils doubled the maximum number the school ever attained under any of his predecessors. At the present time the school, in whatever aspect viewed, whether numerically or intellectually, is equally satisfactory."

97. The new master of the school at Mehmedabad is also conducting his duties most efficiently. Mr. Graham says:—"The manner in which he has conducted himself, since he joined his present appointment, justly entitles him to be ranked among our very best teachers. When he took charge there were only 44 pupils on the register, and within four months afterwards the number rose to 85, which is worthy of mention only because for three or four years before his time 50 or thereabouts was the greatest number that the school ever mustered. But what pleased me best was the very intelligent manner in which he examined his first class before me, (a practice which I have been gradually introducing into all the schools since I first became Superintendent, but which I have never been able

to carry out fully, even in our best schools, until the present year,) in the Mahomedan period of Indian history, 1st volume of Grant Duff's Máhárashtra, English history as far as Henry VIII., grammar, geography, and mathematics, and the clear and fluent style of the answering throughout."

98. In his report on the school at Bardoli, Mr. Graham alludes again to the warm interest taken in its welfare by the Munsif Golám Moidin, who, as usual, on the day of examination distributed a number of prizes, and we must once more be allowed to express our warm acknowledgments to this gentleman for his liberal encouragement of education.

99. We have directed one school to be closed, viz. No. 2 at Broach, and the master to be transferred to Omreth. While the school No. 1 at Broach had 47 boys, No. 2 had but 33, and as the distance between the two is only about three minutes' walk, we felt no reluctance in closing it. Neither should it be inferred from the closing of this school that education in Broach is retrograding, since, besides our Vernacular Schools, Broach has of late obtained two Parsi Panchâyat schools, which are, we believe, conducted on the same principles as the Government ones, so that in the latter Hindus only are now to be found, and not Hindus and Parsis as formerly. Independent, therefore, of the English school, the number of Vernacular schools in Broach is now just double what it was in the commencement of 1850.

100. In concluding his report, Mr. Graham gives the following table, showing at a glance the number of schools and students in his division at the time of his tour, and it will be seen that there is an increase of 284 boys on the previous year :—

Collectorates.	Number of Schools.					Number per Register, exclusive of Female and English Schools.		General Increase on the Year.	Fees Collected in				General Increase of Fees in the Year.	
	Gujarathi Boys' Schools.	Gujarathi Female Schools.	Hindustani Schools.	English Schools.	Total.	1852-53.	1853-54.		1852-53.		1853-54.			
									Rs.	*a.*	*Rs.*	*a.*	*Rs.*	*a.*
Surat	15	1	1	0	17	1076	1151		556	1	710	5		
Broach	6	0	0	1	7	417	493		274	14	281	9		
Kaira	7	0	0	0	7	677	840		400	5	508	4		
Ahmedabad ..	9	2	0	1	12	1043	1013		526	6	601	11		
Total	37	3	1	2	43	3213	3497	284	1757	10	2101	13	344	3

Third Division.

101. The schools in the third division continue in charge of Mr. Baker, who was appointed Superintendent in November 1851. From September till April Mr. Baker was employed in making a tour through the four collectorates of Dharwar, Belgaum, Rutnagiri, and Tanna, which are comprised in his division, and in the course of this time he carefully examined every school it contains. We have recently received a report of the result, and we are happy in being able to state that under Mr. Baker's judicious superintendence a very marked improvement is gradually taking place in the state of the schools.

102. The best in the division are the schools at Rutnagiri, Nos. 1 and 2, Dabhol, Palshet, Malgund, and Chiplun, in the Rutnagiri collectorate; at Tanna, Mahar, and Kalian, in the Tanna collectorate; at Belgaum, Sadalga, Bidi, and Sampgaon, in the Belgaum collectorate; and at Dharwar, Hangal, and Misricote, in the Dharwar collectorate. The

schools in the Rutnagiri collectorate are, as usual, much in advance of those in other parts of the division. Nos. 1 and 2 at Rutnagiri itself have long been the two best in this division, and are fully equal to the best schools in the other divisions. No. 2 is now decidedly the best of the two. All the lessons are carefully taught, and the studies are pursued to the extent of essay writing and the rudiments of natural philosophy. It is, moreover, the largest Vernacular School we have, containing 285 boys. No. 1, however, is an excellent school, containing 210 boys, and its studies are pursued to the same extent as No. 2, but the classes are, perhaps, not quite so carefully taught. The state of both reflects the greatest credit on the masters.

103. It will be recollected, that in consequence of the very unsatisfactory and unpromising state of the schools at Haveri, Tadus, and Ratahali, in the Dharwar collectorate, at Kelshi and Anjarle, in the Rutnagiri collectorate, at Pen and Tarapúr, in the Tanna collectorate, and at Badami, in the Belgaum collectorate, we considered it necessary to close them, regarding it as a waste of our resources to support schools of this description. In adopting this measure, we stated our reasons for so doing through all the schools of the division, so that the inhabitants of every town and village containing a Government school might be made fully aware that schools of this description would no longer be allowed to exist. It will also be recollected, that in our last report we alluded to an important measure we had adopted for removing incompetent teachers, and for supplying their places with thoroughly efficient ones. The following remarks by the Superintendent will show that these measures have been attended with good results. He says:—"The beneficial results of the corrective measures adopted by the Board the year before last to ameliorate the

condition of their schools, are clearly manifested in the improvements which have ensued in the 3rd division, and nothing short of the terms of those proceedings would in any way have answered the emergency. Three years ago, how many schools existed undeserving of the name; now how few that do not attach merit? A spirit of emulation seems to have sprung up almost throughout the division, and both masters and pupils equally participate in the passion, which is powerfully fostered by prospects of pension and employment. Last year the school at Kalian contained but 83 boys; it now musters 160; the Belgaum Maráthi school had 161; it now has 238; and Malgund, Hubli Canarese, Malwan, and Khed have within the same period increased to 47, 53, 40, and 43 boys respectively. The largest schools in the division are Rutnagiri No. 2, containing 285 boys, Belgaum Maráthi, 238, and Rutnagiri No. 1, 210; the rest range below 200. Attendance has increased during the last year in no less than 35 schools, while it has decreased in only 12. The aggregate increase is 680, the decrease 138; leaving an excess in favour of the state of schools when I last successively visited them of 542 boys."

104. The following remarks on school-houses will also show that the benefits of education are gradually becoming more appreciated. Mr. Baker says:—"I am happy to be able to report, that in several parts of the division, communities have at last been brought to a proper sense of their duty to their children, and that the demand lately made by me for suitable school-rooms has in most instances, where such buildings are wanting, been satisfactorily responded to. During the last year we have seen Khed enlarge her school-house, and Chiploon raise a subscription for the construction of a new one; Rutnagiri enlarge her No. 2 school-house, and Rajapur purchase one; Belgaum, Hubli,

and Morub, are also about to build, and Nowlgoond is ready to quit a substantial edifice on account of insufficiency of space, and to construct another. All these movements are very favourable symptoms, and I trust ere long we shall find the merits of education much more generally appreciated."

105. With regard to the state of progress in the schools, Mr. Baker makes the following remarks:—"Not less satisfactory than the improvement in attendance, is the progress made in learning during the last year; and not only have the subjects formerly taught in our schools been, as must appear from my examination returns, more carefully and profitably attended to, but a very important stage in advance of that range has been started upon by many of the schools, and entered with a spirit that requires only the aid of suitable apparati to guarantee progressive action. Map-drawing and essay-writing, subjects hitherto scarcely thought of in our Vernacular schools of this division, have lately engrossed a very judicious amount of attention, and been practised to a great extent, with a degree of success quite gratifying to witness. It may be urged that the mere ability to draw a map does not attach any very intellectual enlightenment, and that in styling the subject an advanced lesson I am overrating the merits of the attainment. The simple work of drawing the map of a country or continent does not raise the understanding of the mind truly, but the practice of drawing them must, by the repetition, if not observation it involves, open to the student a knowledge of the relative positions of countries, and of the site which his own occupies on the face of the earth, that one otherwise tutored could hardly obtain, and would scarcely take the pains minutely to investigate. To this extent, then, unconnected with other considerations, the lesson is an instructive one. Another argument in favour of the practise is, that by engrafting true ideas of

the earth's form upon the Hindu mind, we are dispelling notions of error fostered from infancy, and drawing the talented youth to an inquiry, the seeds of which may afterwards germinate in many ways to his advantage. I trust these answers will be deemed sufficiently satisfactory to the Board to justify the importance I attach to map-drawing. Essay-writing, however, is quite another order of practice: it is no mere art, but the exercise of the reasoning faculties, —the goal, I may say, of rudimental tutoring. To write essays requires both the possession of ideas and the facilities to express them; and these invaluable acquisitions the masters of our most flourishing schools are very laudably striving to secure to their more advanced pupils. In their aims they are very materially assisted by the periodical *Dnyanprásárak*, circulated by the Board. This book, as regularly as it is received, is eagerly perused by the masters, and, to the extent comprehended by them, duly explained to the boys."

106. On the subject of arithmetic, the Superintendent remarks:—"Amongst the subjects of former study, arithmetic is that of all others which, during the last year, has been most carefully taught, and I have reason to hope that DeMorgan's neat and edifying system will soon supersede the unskilful method, wasteful both in time and figures, so long in rule in the division. With the view of drawing the attention of masters the more forcibly to this point, I last year prepared various examples in arithmetic, worked according to DeMorgan's method, and circulated them throughout the schools. This has had a greater effect than all my former instructions on the subject, and is a stratagem I purpose persevering in until my object be fully accomplished. The Belgaum Maráthi school is the one which has been the most successful in this respect, which may perhaps in a great measure be accounted for by my engaging

several of the boys of it to prepare, for distribution, copies of the examples I had worked out."

107. It is, moreover, not only with the improving state of our own schools that we have reason to express satisfaction, but with the commencement of improvement also in private schools, the result, indirectly, of education in our own. There can be no doubt that in course of time many of the young men educated in our institutions will establish schools of their own, and thus gradually pave the way for superseding the worst of the indigenous schools, and the race of incompetent men "who by courtesy are called teachers." Mr. Baker says :—" It is not, I am happy to say, in Government schools alone that education is on the advance : private schools are now springing up, of a very different character from what private schools formerly bore. At Rutnagiri, in conjunction with Mr. Coles the Collector, and Mr. Tucker the late Assistant Judge, who both take a very lively interest in the cause of education, I visited an orderly and well managed school of this description, kept by a party who was a cripple, and had been educated at No. 1 school in the place. Different from the indigenous schools of the country, where for the most part nothing but reading and writing the Modi character and the faintest glimmering of arithmetic are taught, the master of this had organized classes, and was teaching them exactly after our own system. The school altogether stood higher on the scale of merit than any I had seen before of the character. At Malwan, on the Rutnagiri coast, near Vingorla, I discovered a private English school in existence. It was kept by a Brahmin named Sudashiva Náráyan, who had been educated in the Elphinstone Institution, and invited to Malwan by the Moonsiff of the place, a relation of his. This schoolmaster represented that he taught English to two of the Moonsiff's sons, for which he received Rs. 15 a

month, and that he had 13 other pupils under instruction, each of whom paid him one rupee a month. At his request I examined some 8 of his pupils, and for the time they had been learning (three months) I thought them tolerably advanced."

108. In the course of his report, Mr. Baker gives a table showing the number of schools and pupils in his division at the end of February, and this we beg to subjoin. Compared with the corresponding table in our last report, it shows an increase of 256 boys during the year:—

Collectorates.	Schools.				Number of Pupils in attendance per Register, on the 28th February 1854.	Number paying Fees during the Month of February 1854.	Amount collected from Fees during the Eleven Months between the end of March 1853 and the end of February 1854		
	Marathi.	Canarese.	Hindustani.	Total.					
							Rs.	*a.*	*p.*
Rutnagiri....	18	0	0	18	1,951	1,775	1,101	1	0
Tanna	6	0	1	7	662	609	411	14	0
Belgaum	4	7	0	11	918	885	567	13	0
Dharwar	2	9	0	11	978	923	594	4	0
Total	30	16	1	47	4,509	4,192	2,674	0	0

109. The following table will show the principal castes of the 4,509 boys attending these schools :—

Collectorates.	Brahmin.	Shenvi.	Vani.	Lingayat.	Musalman.	Other Castes.	Total.
Rutnagiri	1,025	155	188	0	41	542	1,951
Tanna	286	29	14	0	8	325	662
Belgaum	397	42	12	184	35	248	918
Dharwar	507	16	0	172	55	228	978
Total	2,215	242	214	356	139	1,343	4,509

GRANT MEDICAL COLLEGE.

Establishment of Professors on April 30th, 1854.

Principal, and Professor of the Institutes and Practice of Medicine	C. MOREHEAD, M.D.
Professor of Surgery, Principles and Clinical	J. PEET, Esq.
Professor of Anatomy and Physiology.	G. R. BALLINGALL, M.D.
Professor of Chemistry and Botany	H. GIRAUD, M.D.
Professor of Materia Medica and Pharmacy	R. HAINES, M.B.
Professor of Midwifery, Principles and Clinical	W. C. COLES, M.D.
Professor of Medical Jurisprudence	W. CAMPBELL, M.D.
Acting Professor of Ophthalmic Surgery	H. J. CARTER, Esq.
Curator of the Museum	G. R. BALLINGALL, M.D.

Number of Students.

110. The eighth session was opened on the 15th June 1853, with an able introductory lecture by Dr. Morehead, Principal of the College. The session was attended by 27 students, studying for the diploma of graduate, 28 student-apprentices, and 10 warrant medical officers and hospital assistants, making a total of 65.

Principal's Report.

111. The Principal has recently forwarded his report of the session 1853-54, and this we beg to submit in the appendix. It gives, as usual, a clear statement of the events of the session, and we beg to refer your Lordship to it for full particulars. We would at the same time request the favourable consideration of Government to the excellent suggestion in paragraph 16, for converting the college

compound into a well-arranged garden, which might provide illustrations for instruction in botany, not only to the students of the college, but to those of the other educational institutions at the Presidency. The conclusion of the report is devoted to an elaborate and able statement of the objects had in view in founding the college, the extent to which these objects have been realized, the subsequent extension of the usefulness of the college in educating the subordinate medical establishment, and the importance of an efficient system of clinical instruction.

Final or Diploma Examination.

112. The final or diploma examination was conducted by our colleague, Dr. McLennan, as Government Examiner, assisted by Surgeon M. Stovell, of the European General Hospital, Surgeon W. Arbuckle, M.D., Civil Surgeon, and Assistant Surgeon Campbell, M.D., Superintendent of the Lunatic Asylum, as Assessors. The proceedings on the occasion will be found amply detailed in the report of the Examiner, addressed to your Lordship in Council. This report, and the reply from Government, will be found in the appendix. The result of the examination was the granting of the diploma of graduate to four out of five candidates. Their names will be seen in the report.

Professorships of Materia Medica, of Anatomy and Physiology, and of Ophthalmic Surgery.

113. In our last report we alluded to the subject of increasing the efficiency of the college by creating three new chairs, viz. one of materia medica, a second of anatomy and physiology, and a third of ophthalmic surgery; and we handed up a minute by our colleague, Dr. McLennan, who brought the subject forward, and who dwelt at some length on the desirability of adopting these measures. We

had soon afterwards the satisfaction of being told that the Government of India had recommended the arrangements for the favourable consideration of the Honorable the Court of Directors, and we have recently received intimation from your Lordship in Council that the required sanction has been obtained. Additional proof has thus been afforded of the deep interest taken in the cause of Native medical education by the Government of India, as well as by the Honorable Court, who have most liberally sanctioned every arrangement that has ever been proposed on behalf of this important institution. The gentlemen appointed by your Lordship in Council to the new chairs are Dr. Haines as Professor of Materia Medica and Pharmacy, Dr. Ballingall as Professor of Anatomy and Physiology, and Mr. Carter as officiating Professor of Ophthalmic Surgery, *ex officio* as officiating Oculist. By this increase to the number of professorships, the college has now become organized in accordance with the requirements of the examining boards of the United Kingdom.

Changes among the Professors.

114. Several other changes have taken place among the professors. Dr. Watson, Curator of the Museum, having been compelled by bad health to return to Europe, was succeeded by Dr. Ballingall. Mr. Peele, having resigned the professorship of midwifery, has been succeeded by Dr. Coles, and Dr. Campbell has been nominated Professor of Medical Jurisprudence, to fill the vacancy caused by the transfer of Dr. Coles to the chair of midwifery. Mr. Peet, having returned from leave of absence on sick certificate, resumed charge of his duties in March.

Favourable opinion of the

115. Agreeably to the instructions of Government, we have placed in the appendix a

Medical Board on the results of the College.

report by the Medical Board, giving a highly gratifying account of the entire success of the efforts hitherto made, by means of this College, to impart a knowledge of medical science to the Natives of this country.

BOOK DEPOSITORIES

Of the Elphinstone Institution and Poona College.

116. In previous reports we mentioned the objects for which these depositories had been formed, and we named the different towns in the interior in which it had been considered desirable to establish branch depositories. We will now mention briefly the additions which have been made to our stock of Vernacular books during the year.

117. The following works were printed for us in Bombay, on account of the depository of the institution:—

	Maráthi.	No. of copies.
1.	Esop's Fables	2,000
2.	Spelling Book or Lipidhara	3,000
3.	Bál Shástri's Maráthi Grammar	1,000
4.	Moral Maxims	3,000
5.	Numeration Tables	1,000

118. The following works were in the press at the close of last month:—

1. History of British India, in Maráthi.
2. Esop's Fables, in Gujeráti.

119. The following Vernacular publications were purchased during the year:—

	Maráthi.	No. of copies.
1.	Gangádhar Shástri's Maráthi Grammar ..	500
2.	Treatise on Cleanliness	250
3.	Observance of Truth	100
4.	Evils of Licentiousness	50
5.	Girl's 1st Book	60
6.	Course of Reading	24
	Sanscrit.	
1.	Hitopadesh	80
	Gujeráti.	
1.	Girl's 1st Book.....	200

120. The following works were lithographed during the year at the press of the Poona College:—

		No. of copies.
1.	Sanscrit and Maráthi Vocabulary	1,000
2.	History of the Maráthas, Vol. II.....	1,500
3.	Bálmitra, or Berquin's Children's Friend, Vol. I.....	2,000
4.	England Delineated	1,000
5.	Poetical Extracts	500
6.	Dialogues, Sanscrit and Maráthi.....	250
7.	Sanscrit 1st Reader, 1st edition	100
8.	Do. 2nd do., 1st do.....	500
9.	Jágti Jot, Modi.....	2,000
10.	Shakuntala Nátak.....	500
11.	Sanscrit 1st Reader, 2nd edition..	800
12.	Translation of the Address of Mr. Warden.	300
13.	Kuvaluyánand Satik	1,000
14.	Class Catalogues, &c. for the College	1,300
15.	Examination Papers	423
16.	Alankar Vevek, for Dakshiná Prize Committee	500
17.	History of Captain Cook, for ditto	500

121. Having now concluded our report, we have only to express a hope that the general state of education will be deemed by your Lordship in Council to be satisfactory, and that the manner in which our duties have been discharged will meet with your approval.

We have the honor to be,
My Lord,
Your Lordship's most obedient Servants,

(Signed) JOHN WARDEN, *President.*
„ JOHN MCLENNAN,
„ METCALFE LARKEN,
„ JAGONATH SANKERSETT,
„ BOMANJI HORMASJI,
„ BHAU DAJI,
Members.
„ M. STOVELL, *Secretary.*

Bombay, 10*th May* 1854.

APPENDICES.

APPENDIX No. I.

STATEMENT OF ACCOUNTS.

DR. *Board of Education in Account with Education.* CR.

1853.		Rs.	a.	p.	1853.	I.	Rs.	a.	p.
Apr. 30th	Government Annual Grant (General).	1,25,000	0	0	Apr. 30th	*Establishments borne on General Grant, Interest on Funded Capital, Fees, and Subscriptions.*			
,, ,,	Ditto do. for Poona College.	25,500	0	0		General Charges. A — Establishment of Board of Education.	7,070	5	6
,, ,,	Ditto do. for do. do. Depository	3,837	0	0		General Charges. A — Superintendence of Schools	12,821	11	1
,, ,,	Ditto do. for Grant Medical College	24,473	10	10		General Charges. A — Government Examiner of the Grant Medical College	1,200	0	0
,, ,,	Ditto do. for Sattara Province	7,000	0	0		General Charges. A — Publication of Reports	1,071	15	10
,, ,,	Subscriptions	3,001	0	0		General Charges. A — Gratuities to Masters removed from service	4,011	6	8
,, ,,	Fees from Students in the Elphinstone Institution	12,369	0	0		B Presidency Charges. Elphinstone Institution	53,221	12	9
,, ,,	Ditto do. in the Poona College	1,051	8	0		B Presidency Charges. Vernacular Schools	5,576	10	4
,, ,,	Ditto do. in the English Schools	3,364	1	0		C Mofussil Charges. Poona College	9,624	0	0
	PRIVATE ENDOWMENTS.*					C Mofussil Charges. *1st Division*, Deccan. English School (1)	2,448	0	0
						C Mofussil Charges. *1st Division*, Deccan. Vernacular do. (127)	18,858	1	0
						C Mofussil Charges. *2nd Division*, Gujarat. English Schools (3)	13,740	0	0
						C Mofussil Charges. *2nd Division*, Gujarat. Vernacular do. (41)	8,917	5	8
,, ,,	Interest on the Funded Capital	20,818	15	8		C Mofussil Charges. *3rd Division*, S.M.Country. English Schools (3)	2,143	15	6
						C Mofussil Charges. *3rd Division*, S.M.Country. Vernacular do. (51)	11,053	8	10
						C Mofussil Charges. Books supplied to English Schools	1,157	1	5
						C Mofussil Charges. Ditto to Vernacular do.	2,642	9	0

			II.				
			Establishments on Special Grants.				
			D	Poona College	25,992	1	6
				Do. do. Depository	3,837	0	9
			E	Grant Medical College	24,473	10	10
			F	Sattara Province	4,359	4	9
					2,14,220	8	8
			Balance		12,194	10	10
Total.... Rupees		2,26,415 3 6		Total.... Rupees	2,26,415	3	6

* Elphinstone Professorship Fund, West Scholarship Fund, Clare Scholarship Fund, and Elphinstone Institution Fund.

(Errors excepted)

(Signed) M. STOVELL, *Secretary.*

(Signed) JOHN WARDEN, *President.*
„ JOHN MCLENNAN.
„ METCALFE LARKEN,
„ JAGONATH SANKERSETT,
„ BOMANJI HORMASJI,
„ BHAU DAJI,
Members.

Bombay, 30th April 1853.

DR. *Board of Education in Account with Government Annual Grant of Rs. 1,25,000.* CR.

1853.		Rs.	a.	p	1853.	*English Department.*	Rs.	a.	p.
Apr. 30th	Government Annual Grant	1,25,000	0	0	Apr. 30th	Elphinstone Institution*	39,179	5	8
					,, ,,	Poona College*	9,624	0	0
					,, ,,	7 English Schools	16,124	15	11
					,, ,,	Government Examiner of the Grant Medical College	1,200	0	0
					,, ,,	Publication of Reports	1,071	15	10
					,, ,,	Gratuities to Masters removed from service	4,011	6	8
						Vernacular Department.			
					,, ,,	7 Vernacular Schools at the Presidency	5,576	10	4
					,, ,,	127 Ditto ditto in the Deccan	18,858	1	0
					,, ,,	39 Ditto ditto in Gujarat	8,917	5	8
					,, ,,	56 Ditto ditto in S. M. Country	11,053	8	10
					,, ,,	Books supplied to Vernacular Schools	2,642	9	0
,, ,,	Balance	6,081	10	0	,, ,,	Superintendence of Schools	12,821	11	1
	Total....Rupees	1,31,081	10	0		Total....Rupees	1,31,081	10	0

* In this Account, only that portion of the expense appears which is borne by the Government Grant.

(Errors excepted)
(Signed) M. STOVELL, *Secretary.*

(Signed) JOHN WARDEN, *President.*
„ JOHN MCLENNAN,
„ METCALFE LARKEN,
„ JAGONATH SANKERSETT, } *Members.*
„ BOMANJI HORMASJI,
„ BHAU DAJI,

Bombay, 30th April 1853.

ELPHINSTONE PROFESSORSHIP FUND.

DR. *Abstract Account of Receipts and Disbursements, from the 1st May 1852 to the 30th April 1853.* CR.

1852.		Rs.	a.	p.	1853.		Rs.	a.	p.	Rs.	a.	p.
May 1st	Balance of last year's Account.	12,159	13	2	Apr. 30th	Salary of Secretary	2,400	0	0			
1853.						Ditto of Professors	24,982	15	0			
Apr. 30th	Annual Allowance from Govt..Rs. 22,000 0 0					Normal Scholarship Allowances	1,153	5	4			
						Salary of Clerks	1,832	14	6			
,, ,,	Interest on the Funded Capital. 16,436 4 0					Ditto of Peons	288	0	0			
										30,657	2	10
						Contingent Expenses.						
						Government Agent's Commission and Fees	53	11	6			
						Stationery	41	4	0			
						Sundries	72	15	0			
						Binding Office Records	35	4	0			
						Professor Patton's Allowance on leaving India	1,500	0	0			
										1,703	2	6
						Invested in 5 per Cent. Government Promissory Note	....			11,219	0	0
										43,579	5	4
						Balance in the Bank of Bombay	6,998	1	6			
						In hand	18	10	4			
										7,016	11	10
	Total....Rupees	50,596	1	2		Total....Rupees				50,596	1	2

(Errors excepted)

Bombay, 30th April 1853. (Signed) M. STOVELL, *Secretary.*

We the undersigned have examined this Account, and do find a Balance in favour of the Elphinstone Professorship Fund, amounting to Rupees seven thousand and sixteen, annas eleven, and pies ten.

(Signed) JOHN WARDEN, *President.*
,, JOHN MCLENNAN,
,, METCALFE LARKEN, } *Members.*

(Signed) JAGONATH SANKERSETT,
,, BOMANJI HORMASJI,
,, BHAU DAJI, } *Members.*

WEST SCHOLARSHIP FUND.

DR. *Abstract Account of Receipts and Disbursements, from the 1st May 1852 to the 30th April 1853.* CR.

1852.		Rs.	a.	p	1853.		Rs.	a.	p.
May 1st	Balance of last year's Account.....	1,148	2	5	Apr. 30th	Scholarship Allowances.....	1,575	0	0
1853.					,, ,,	Government Agent's Commission and Fees.....	5	3	8
Apr. 30th	Annual Allowance from Government.	1,124	0	0	,, ,,	Invested in 5 per Cent. Government Promissory Note	1,645	6	8
,, ,,	Interest on Funded Capital	1,099	1	2			3,225	10	4
						Balance in the Bank of Bombay	145	9	3
	Total....Rupees	3,371	3	7		Total....Rupees	3,371	3	7

(Errors excepted)

Bombay, 30th April 1853. (Signed) M. STOVELL, *Secretary.*

We the undersigned have examined this Account, and do find a Balance in favour of the West Scholarship Fund, amounting to Rupees one hundred and forty-five, annas nine, and pies three.

(Signed) JOHN WARDEN, *President.*
,, JOHN MCLENNAN,
,, METCALFE LARKEN,
,, JAGONATH SANKERSETT, } *Members.*
,, BOMANJI HORMASJI,
,, BHAU DAJI,

CLARE SCHOLARSHIP FUND.

DR. *Abstract Account of Receipts and Disbursements, from the 1st May 1852 to the 30th April 1853.* CR.

1852.		Rs.	a.	p.	1853.		Rs.	a.	p.
May 1st	Balance of last year's Account.....	1,816	4	0	Apr. 30th	Scholarship Allowances	2,580	0	0
1853.					,, ,,	Government Agent's Commission and Fees	6	7	6
Apr. 30th	Annual Allowance from Government.	1,632	0	0	,, ,,	Invested in 5 per Cent. Government Securities..	2,191	13	0
,, ,,	Interest on Funded Capital	1,393	10	6			4,778	4	6
						Balance in the Bank of Bombay.....	63	10	0
	Total....Rupees	4,841	14	6		Total....Rupees	4,841	14	6

(Errors excepted)

Bombay, 30th April 1853. (Signed) M. STOVELL, *Secretary.*

We the undersigned have examined this Account, and do find a Balance in favour of the Clare Scholarship Fund, amounting to Rupees sixty-three and annas ten.

(Signed) JOHN WARDEN, *President.*
,, JOHN MCLENNAN,
,, METCALFE-LARKEN,
,, JAGONATH SANKERSETT,
,, BOMANJI HORMASJI,
,, BHAU DAJI,
} *Members.*

GAEKWAR SCHOLARSHIP FUND.

DR. *Abstract Account of Receipts and Disbursements from the 1st May 1852 to the 30th April 1853.* CR.

1852.		Rs.	a.	p.	1853.		Rs.	a.	p.
May 1st	Balance of last year's Account.....	340	5	9	Apr. 30th	Scholarship Allowances	80	0	0
1853.						Government Agent's Commission	0	10	0
							80	10	0
Apr. 30th	Interest on Funded Capital	250	0	0		Balance in the Bank of Bombay.....	509	11	9
	Total....Rupees	590	5	9		Total....Rupees	590	5	9

(Errors excepted)

Bombay, 30th April 1853.

(Signed) M. STOVELL, *Secretary.*

We the undersigned have examined this Account, and do find a Balance in favour of the Gaekwar Scholarship Fund, amounting to Rupees five hundred and nine, annas eleven, and pies nine.

(Signed) JOHN WARDEN, *President.*
" JOHN MCLENNAN,
" METCALFE LARKEN,
" JAGONATH SANKERSETT,
" BOMANJI HORMASJI,
" BHAU DAJI,
} *Members.*

DR. *Sundarji Jivaji Prize in account with the Elphinstone Institution.* CR.

1852.		Rs.	a.	p.	1853.		Rs.	a.	p.
May 1st	Balance of last year's Account	236	0	0	Apr. 30th	Government Agent's Commission	0	1	8
1853.									
Apr. 30th	Interest on Funded Capital	40	0	0		Balance	275	14	4
	Total....Rupees	276	0	0		Total....Rupees	276	0	0

(Errors excepted)

Bombay, 30th April 1853. (Signed) M. STOVELL, *Secretary.*

We the undersigned have examined this Account, and do find a Balance in favour of the Sundarji Jivaji Prize Fund, amounting to Rupees two hundred and seventy-five, annas fourteen, and pies four.

(Signed) JOHN WARDEN, *President.*
" JOHN MCLENNAN,
" METCALFE LARKEN,
" JAGONATH SANKERSETT, } *Members.*
" BOMANJI HORMASJI,
" BHAU DAJI,

DR. *Bell Prize in Account with the Elphinstone Institution.* CR.

1852.		Rs.	a.	p.	1853.		Rs.	a.	p.
May 1st	Balance of last year's Account	197	8	0	Apr. 30th	Government Agent's Commission	0	2	0
1853.									
Apr. 30th	Interest on Funded Capital	50	0	0		Balance	247	6	0
	Total....Rupees	247	8	0		Total....Rupees	247	8	0

(Errors excepted)

Bombay, 30*th April* 1853. (Signed) M. STOVELL, *Secretary.*

We the undersigned have examined this Account, and do find a Balance in favour of the "Bell Prize Fund," amounting to Rupees two hundred and forty-seven and annas six.

(Signed) JOHN WARDEN, *President.*
" JOHN MCLENNAN,
" METCALFE LARKEN,
" JAGONATH SANKERSETT, } *Members.*
" BOMANJI HORMASJI,
" BHAU DAJI,

APPENDIX No. II.

Statement of Fees.

Tabular Statement, showing the Amount of Fees received from the 1st of April 1853 to the 31st March 1854, from the Elphinstone Institution and Government Vernacular Schools at the Presidency, and from the English and Vernacular Schools in the Districts.

Presidency.	*Rs.*	*a.*	*p.*	*Rs.*	*a.*	*p.*
Elphinstone Institution	13,169	0	0			
Government Vernacular schools	523	0	0			
				13,692	0	0
English Schools.						
Surat	1,700	0	0			
Ahmedabad	820	0	0			
Broach	415	8	0			
Ahmednuggur	381	8	0			
Rutnagiri	181	8	0			
Dharwar	134	8	0			
Tanna	826	12	0			
Sattara	355	4	0			
				4,815	0	0
Vernacular Schools.						
1st Division.						
In the Collectorate of Poona	103	13	0			
Ditto of Ahmednuggur	139	0	0			
Ditto of Sholapoor	48	4	0			
Ditto of Khandesh	50	13	0			
In the Districts of Sattara	96	4	0			
				438	2	0
2nd Division.						
In the Collectorate of Surat	102	3	0			
Ditto of Broach	50	8	0			
Ditto of Kaira	92	8	0			
Ditto of Ahmedabad	100	7	0			
				345	10	0
3rd Division.						
In the Collectorate of Tanna	76	14	0			
Ditto of Rutnagiri	191	14	0			
Ditto of Belgaum	107	12	0			
Ditto of Dharwar	115	14	0			
				492	6	0
Total.... Rupees				19,783	2	0

The fees from the Institution, from the Vernacular schools at the Presidency, and from all the English schools, excepting that at Tanna, which is mainly supported by the inhabitants themselves, are carried to the General Fund, on account of Education.

The fees from the Vernacular schools in the districts are disposed of differently. One half is given to the masters of the different schools, provided the annual examination is satisfactory; the remainder is disposed of in repairing school-houses, in providing books for the school libraries, in gratuities to masters and monitors, or in any other way which the School Committee and Superintendent may consider more desirable.

APPENDIX No. III.

STATEMENT OF BOOK DEPOSITORY.

DR. *Receipts and Disbursements of the Book Depository of the Elphinstone Institution for* 1852-53. CR.

1852.		Rs. a. p.	Rs. a. p.	1853.		Rs. a. p.	Rs. a. p.
May 1st	Balance of last year's Account	.....	1,753 0 8	Apr. 30th	Books purchased in England	3,590 14 5	
1853.				,, ,,	Ditto do. in Bombay	2,987 12 11	
				,, ,,	Ditto from Poona College	5,231 14 0	
							11,830 9 4
Apr. 30th	Books sold at the Presidency	7,937 12 6		,, ,,	*New Editions of Works Printed.*		
,, ,,	Ditto do. in the Branch Depositories	1,943 3 4					
			9,880 15 10		3,000 copies of Spelling book, Gujerati	315 0 0	
,, ,,	Ditto do. to Poona College	407 4 0			2,000 ,, of Outlines of Grammar	205 0 0	
,, ,,	Ditto do. to Grant Medical College	67 2 1			1,088 ,, of Moral Class Book	952 0 0	
,, ,,	Ditto supplied to Government English Schools in the Mofussil	3,924 3 0			1,000 ,, of History of British India	1,250 0 0	
					1,000 ,, of Pleasing and Moral Tales	210 0 0	
,, ,,	Ditto do. to the Vernacular Schools in the Mofussil	2,098 8 0			2,000 ,, of Moral Maxims	215 0 0	
					1,000 ,, of Vernacular Reader, No. 1	720 0 0	
,, ,,	Ditto do. to Regimental Schools	5,003 9 9			5,000 ,, of Jamiul Hickayat, Hindustani	460 0 0	
			11,500 10 10		2,000 ,, of Talim Nameh, 2 vols	845 0 0	
,, ,,	Ditto presented to Native Libraries	.....	591 3 6				5,172 0 0
				,, ,,	Charges for translation	100 0 0	
				,, ,,	Binding Books for sale	645 0 0	
				,, ,,	Depositary's Commission	1,493 5 4	
				,, ,,	Advance on account of Books and School Materials	553 7 5	
							2,791 12 9
							19,794 6 1
				,, ,,	Stock of Books in hand on the 1st May 1852.	70,434 15 0	
				,, ,,	Ditto ditto on the 30th April 1853	68,699 11 0	
							1,735 4 0
							21,529 10 1
				,, ,,	Balance		2,196 4 9
		Total....Rupees	23,725 14 10			Total....Rupees	23,725 14 10

(Errors excepted)

Bombay, 30th April 1853.

(Signed) M. STOVELL, *Secretary.*

APPENDIX No. IV.

LIST OF SUBSCRIPTIONS TO THE ELPHINSTONE INSTITUTION, RECEIVED FOR 1853.

	Amount of Subscription.		
	Rs.	*a.*	*p.*
Adam Alee Sultan, Esq	15	0	0
Annundrow Gunput Senoy, Esq	25	0	0
Atmaram Madhowjee, Esq	25	0	0
Burjorjee Viccajee, Esq	19	0	0
Bhawoo Dajee, Esq	25	0	0
Bomanjee Hormusjee, Esq	50	0	0
Bappoo Jagonnath Josey, Esq	15	0	0
Beiramjee Erajee Cola, Esq	25	0	0
Bomanjee Framjee Cama & Co., Messrs	101	0	0
Bhasker Sunderjee, Esq	15	0	0
Bocarro, J. J., Esq	15	0	0
Cursetjee Nasserwanjee Cama, Esq	105	0	0
Cursetjee Jamsetjee, Esq	50	0	0
Cursetjee Sorabjee, Esq	60	0	0
Cursetjee Furdunjee, Esq	15	0	0
Cowasjee Jahangeerjee, Esq	25	0	0
Crustnanath Narronjee, Esq	15	0	0
Dhunjeebhoy Nasserwanjee Cama, Esq	100	0	0
Dhunjeebhoy Cursetjee, Shroff, Esq	25	0	0
Dhunjeebhoy Framjee, Esq	15	0	0
Dorabjee Nasserwanjee Cama, Esq	25	0	0
Dosabhoy Sorabjee, Esq	10	0	0
Dadabhoy Dorabjee, Esq	15	0	0
D'Silva, Luis F., Esq	15	0	0
D'Ga, A. G., Esq	45	0	0
D'Rozario, Dr. C. B	15	0	0
Framjee Nasserwanjee, Esq	30	0	0

	Rs.	*a*	*p.*
Fitzclarence, the Right Honorable Lord Frederick.	200	0	0
Govind Balcrustna, Esq.	15	0	0
Hormusjee Manockjee, Esq.	30	0	0
Hormusjee Peştonjee Framjee, Esq	15	0	0
Howard, W., Esq.	50	0	0
Hannah, John T., Esq	15	0	0
Jamsetjee Jejeebhoy, Sir, Kt.	150	0	0
Jagonnath Sankersett, Esq.	100	0	0
Limjee Manockjee, Esq.	15	0	0
Mahomed Ameen Rogay, Esq.	100	0	0
Mungledas Nathoobhoy, Esq	30	0	0
Mirza Alee Jhan, Esq.	15	0	0
Muncherjee Framjee Cama, Esq.	25	0	0
Manockjee Cursetjee, Esq.	15	0	0
Manockjee Cursetjee Deibu, Esq.	15	0	0
Mangesh Pandoorang, Esq.	25	0	0
Narayan Dinanathjee, Esq	25	0	0
Narayan Dajee, Esq.	15	0	0
Nowrojee Furdunjee, Esq.	15	0	0
Purshotam Hirachand, Esq	15	0	0
Pestonjee Nowrojee Pochajee, Esq.	80	0	0
Raghoonath Narayan, Esq	25	0	0
Rustomjee Jamsetjee, Esq.	25	0	0
Sorabjee Framjee, Esq.	15	0	0
Sorabjee Jamsetjee, Esq.	25	0	0
Sorabjee Pestonjee Framjee, Esq.	25	0	0
Shricrishna Janardhan, Esq.	15	0	0
Verjeewandass Madowdass, Esq.	30	0	0
Venaek Wassoodewjee, Esq	15	0	0
Virzbhoocandass Madowdass, Esq.	30	0	0
Venaek Annundrow, Esq	15	0	0
Vears, H., Esq.	15	0	0
Wassoodew Pandoorang, Esq.	15	0	0
Wassoodew Narayan, Esq	25	0	0
Walker, W., Esq	50	0	0
Total. . . .	2,185	0	0

APPENDIX No. V.

ANNUAL MEETING FOR THE PRESENTATION OF SCHOLARSHIPS AND PRIZES.

The annual distribution of prizes and scholarships to the successful students of the Elphinstone Institution took place yesterday afternoon at four o'clock, at the Town Hall, the Right Honorable the Governor in the chair. The large hall was filled with the pupils both of the college and school departments, and a large number of visitors, both European and Native, amongst whom we observed the following gentlemen :—the Honorable John Warden; Messrs. W. E. Frere, M. Larken, M. A. Coxon, P. Adam, Bomanji Hormasji, Jagonnath Sankersett, Bhau Daji, Verjeevandass Madhowdass, Narayan Dinnanath, Nowrozji Furdunji, Meerza Ali Jhan, Dhunjibhoy Cursetji, Dhunjibhoy Framji, Nowrozji Dorabji, A. K. Corfield, C. J. Erskine, J. T. Zorn, A. S. LeMessurier, J. Connon, A. B. Boswell, N. W. Oliver, A. Remington, Manekji Cursetji; Drs. McLennan, Carter, Coles, Giraud, Stovell, Arbuckle, Mackenzie; the Rev. Messrs. Spring, Bowen, Hume; Professor Green; Dr. Dallas; Brigadier Cracklow; Colonels Lyons, Bates, Blood, Willoughby; Major Parr; Captain Cruickshank; several other European and Native Officers, Graduates of the Grant Medical College, &c. &c.

The Honorable Mr. Warden, President of the Education Board, opened the proceedings of the day by addressing the Right Honorable the Chairman as follows :—

My Lord,—As your Lordship has done me the favour of reading my address to Lord Frederick Fitzclarence on the last occasion of distributing the prizes to the students of the Elphinstone College, in which I attempted to sketch the rise, progress, and distinctive features of the system of public instruction imparted under the orders of the Government to the inhabitants of this Presidency; and as you have since paid a private visit to

the college, and witnessed the actual work of the young men in the several departments of learning, there is little left for me to say to-day which your own observation has not already discovered.

During the last year or two, indeed, the Board of Education have been obliged to adopt measures, the effect of which must have been to discourage education. We had for years been drawing on a reserve fund, till that fund was well nigh exhausted; and, from want of pecuniary means, have been obliged to refuse to open schools, to reward exertion, and even to carry out public promises of assistance to those who came forward to advance the cause.

Within the last month or two, however, the home authorities have added Rs. 50,000 per annum to the original grant of Rs. 1,25,000, in addition to the item of Rs. 17,000 granted for Scinde and Sattara, and we are once more in easy circumstances.

In spite, however, of this dispiriting state of things, the number of scholars has increased during the last year from 13,757 to 16,265, or by 2,508; and by this time next year, when new schools shall have been established, and those already existing improved, I have no doubt that vast numbers will be added to our school lists.

But the most remarkable incident in the history of public instruction which has recently occurred in this Presidency is the spread of education among females.

When I went to Poona in 1851 as Judicial Commissioner, I visited the two first girls' schools established in that city: they were lodged in small houses, and my visit to them reminded me of the account of the assembly of the early Christians "in an upper room with the doors shut, for fear of the Jews."

The school-mistress, the wife of a gardener, who educated her in order that she might be the means of elevating her countrywomen from their state of miserable ignorance, drew her saree over her face, and was with difficulty persuaded to examine a class in my presence; and a band of young matrons, who had formed themselves into a normal class, refused to see me on any terms, though I am told my honorable predecessor Sir Erskine Perry, and my present honorable colleague Mr. Lumsden, were considered more honorable, or perhaps more harmless than I was,

and were shortly afterwards admitted to the presence of these ladies.

Such was the state of matters in 1851. I assembled in the court-yard of the Poona College, in the presence of the Governor, the Bishop, and a host of others, a collection of more than a hundred girls, who were publicly examined, and we heard stories of one girl having read herself blind, and of another who had died from the effects of study.

There are at the Presidency eight girls' schools, of which three are Maráthi, one Gujaráti, and four Parsi, the total number of girls being 500. We have no official returns of the girls' schools in the Mofussil: they are principally at Poona and Ahmedabad, and may be roughly estimated at 500 more, thus giving one girl for every sixteen boys who are being educated.

So effectively is this leaven spreading, that although we might appropriate part of our new grant to girls' schools, the general feeling at the Board seems to be that we should "leave well alone." Your lordship will admit that this is a striking incident, and one that betokens the wisdom of the principles on which our institutions for public instruction were based.

It is remarkable, that in a country like India, where, a few years ago, the men could not appreciate education, and the women lived in a state of servile degradation, the Natives should be now pushing on female education without any aid from us. We have, besides, endless literary and scientific societies, libraries, Native improvement societies, Native lecturers on such subjects as the electric telegraph, all combining to prove that the desire for knowledge is ardent and universal, and, whether for good or for evil, must be satisfied.

My Lord, your name is associated with almost everything that is great and good in this Presidency, and especially with what relates to education. "Elphinstone College," "Elphinstone Professors," "Elphinstone Scholars," are as familiar to us as household words. No sordid selfish motive was allowed to mix itself up in the mind of your illustrious uncle with the consideration of this great work. His feeling on the subject was one day thus significantly conveyed to me: "*Even if it be the high road to England,*" he said, "we must educate the Natives." He is, I say, a great and a good man.

His genius contributed to the conquest of the Peshwa's dominions, for he was as good a soldier as he was a civilian, and he afterwards knitted to himself the hearts of the people whose king he had helped to dethrone, and in the subjugation of whose country he had been an active instrument ; and he did this by exhibiting a magnanimous compassion for the conquered people at his feet, and by a liberal consideration of their claims, whether to surinjams or inams, or to any other provision which those who have come after him would do well to imitate.

He afterwards caused the majority of the Protestant churches of this Presidency to be raised to the honour of that God who had blessed the arms of his country ; he digested our code which we love to call by his name ; he introduced the revenue survey, which, under the auspicies of my friends Wingate and Goldsmid, has proved the greatest blessing the country has seen ; and in private life, by an unceasing flow of the milk of human kindness, he attracted to him every man, woman and child who came within his influence.

My Lord, if it be a subject of congratulation to yourself, that you are now seated under the shadow of your uncle's statue, filling the same position that he held—it is not less so to the people of this place that they are ruled over by one in whose veins the blood of Elphinstone flows ; and to myself personally it is a source of great pleasure to be associated with a relative of my earliest official friend and patron ; for, although I now fill three of the very highest offices at this Presidency, if I were told to point to the bright spot in my life,—to that which reflects most honour on my official career,—I should point to the days when, though little more than a boy, I was selected to attend him in his gallops over the Deccan (for he was always at a gallop), with no higher title than that of "Sub-Secretary" ; and we have asked you to sit in that chair to-day, not so much because you are the Governor, as because you are the kinsman of him of whom I have been speaking—who planted, and watered, and watched over the institutions now entrusted to our care.

Mr. Harkness, the Principal, then read the following address :—

There are now 1,518 pupils in the Government schools in Bombay. Of these 474 receive instruction in and through the

Vernaculars only ; 953 are learning English and the branches of knowledge usually taught in English schools in this country ; and 91 are studying the higher branches of literature and science in the college division of the Institution.

Previous to admission into the English school, a boy must be able to read and write his own language, and must know the simple rules of arithmetic. The Vernacular schools, therefore, are chiefly preparatory to the English. But as a small proportion of the pupils get no other education but what they afford, the teaching is not limited merely to what is requisite to qualify for admission into the English school. The outlines of history, geography, and astronomy, the elements of geometry and algebra, plane trigonometry, mensuration, and the rudiments of natural philosophy, are included in the course of study.

There are 268 pupils in the Maráthi schools, 176 in the Gujaráti, and 30 in the Hindustáni school. The proficiency in the last falls short of that allowed in the others.

Besides these, a number of private schools, chiefly Gujaráti, have lately sprung up in different parts of Bombay. Some of them are numerously attended,—the bulk of the pupils being Parsis. The object of all is to prepare pupils for the entrance examination at the Institution.

Of the 953 pupils in the English schools, 379 are Hindús, 523 Parsis, 24 Musalmans, 22 Christians, and 5 Jews. The Hindús are of 23 different castes, but belong chiefly to the Parbhu, Shenvi, Brahmun, and Sonar castes, the greatest number being Parbhus.

In the central school and Fort branch a fee of Rs. 2 a month is charged, and at Mumbadévi one rupee. But a poor boy, whose average place is in the upper half of his class, may be entered as a free pupil. This privilege is now enjoyed by 192 ; 761 are pay-pupils.

These 953 pupils are divided into 24 classes for English and general knowledge, and into the same number for arithmetic and mathematics. They are taught by 24 teachers, viz. 1 English master, 16 Parsis, and 7 Hindús.

Every teacher has thus a class in English and a class in arithmetic, each class consisting on an average of about 40 ; but the

two classes not, necessarily at least, composed of the same boys. A majority of the boys generally are the same, but they are classed according to proficiency in the subject taught.

It has been stated that a boy must be able to read and write his own language before he is admitted into the English school. But in order that this knowledge may be kept up and improved while he is learning English, a portion of the time is devoted, in each class, to instruction in the Vernaculars. For this purpose, 7 Vernacular teachers are entertained, 4 Gujaráti and 3 Maráthi.

These relieve the teachers of the junior classes one hour every alternate day. On the intermediate days the class is taken by one of the scholars in the college division, who undertakes the teaching of some particular subject, such as geography, and who is held responsible for the proficiency of the class in that subject.

The scholars are thus gradually accustomed to the art of teaching. Their knowledge of the subject is systematized and fixed by the necessity of communicating it, and the teachers are enabled to devote the spare hours to self-improvement, by attending the lectures of one of the professors, or by consulting books of reference in the library.

In the Vernacular classes the most frequently occurring roots are explained. But in order that those, who intend to prosecute their studies in the college, may be enabled to understand fully the meaning of Sanscrita and Persian words met with in Maráthi and Gujaráti works, the rudiments of Sanscrita and Persian are taught in the 6th or highest school class, the former by a Shástri of the Poona College, and the latter by a native of Persia.

The number of students in the college at the end of the year was 76. 35 have been admitted, and 20 others have left since the examination. Hence the number at present is 91. 51 of these are Hindús, 38 Parsis, and 2 Christians.

These are divided into four classes, named first, second, third, and fourth year's students, according to their standing in the college. A certain number of scholarships are open for competition to the students of each year, viz. 24 of the monthly value of Rs. 10 to the first, 12 of the value of Rs. 15 to the second, 6 of the value of Rs. 20 to the third; and 3 of the value of Rs. 30 a month to the fourth year's students. These are all

awarded for proficiency in certain branches of literature and science, according to regulations sanctioned by the Board of Education.

Besides these, there are two Gaikwar scholarships, one for superior proficiency in Maráthi, and the other for superior proficiency in Gujaráti. These are open for competition to students who have completed two years of the college course, and may be held in addition to another scholarship.

The number of candidates found qualified for these different grades at the late examinations considerably exceeded the number of scholarships, which were therefore all awarded, and are now to be presented. Consequently, of the 91 students now in the college, 45 are stipendiary scholars.

Candidates who fail to obtain 60 per cent. of the estimated value of the answers to the questions proposed for any of these scholarships, but who get 40 per cent. marks or upwards, are entitled to the privilege of being enrolled as free scholars. 30 of the present number attend gratuitously under this rule, and the remaining 16 are pay-students, who pay Rs. 60 a year in advance. These are not subjected to examinations, unless voluntarily.

The teaching of the students in the college division is entrusted to 4 professors, 3 European and 1 Native. The division of labour is as follows, viz. one professor teaches logic, mental and moral philosophy ; one, English literature, political economy, and history ; one, mathematics and natural philosophy, and one, chemistry and natural history. The last, who is also one of the professors in the Grant Medical College, lectures three hours a week, two on chemistry, and one on geology and botany, in alternate years. The other professors teach three or four hours a day.

It is unnecessary to enter into details regarding the subjects of study in the different classes, or the manner in which the pupils acquitted themselves at the examination. Full information on these points is given in the annual report lately submitted to the Board of Education, which will shortly be printed.

I may mention that there has been during the year an increase upon the whole of 153 pupils, of whom 15 are in the college division.

List of Scholarships and Prizes to be awarded at the Annual Meeting on the 3rd April 1854.

3 First class Normal Scholarships.
6 Second ditto ditto.
12 West Scholarships.
24 Clare ditto.
2 Gaekwar ditto.

I.

Sir Erskine Perry's Prize.—A gold medal for the best essay on "The Moral and Social Causes of the Crusades, and their effects on Civilization."

Successful competitor's name Pestonji Jehangeer, then a 1st class normal scholar, now a teacher in the Elphinstone Institution.

II.

Prize of Rs. 250, by a Native gentleman, for the best essay on "Education of the Natives in the Bombay Presidency; its Results, present and prospective."

Successful competitor's name Kaikhosru Hormasji, a teacher in the Elphinstone Institution.

III.

Sundarji Jiwaji's Prize of Rs. 40, in books, for the best essay on "The Influence of a general diffusion of Scientific Knowledge in dissipating Superstitious notions and groundless fears regarding unfamiliar Natural Phenomena."

Successful competitor's name Harishankar Balcrishna, then a 2nd class normal scholar, now a teacher in the Elphinstone Institution.

IV.

Bell Prize.—A silver medal and chain, of the value of Rs. 50, for the best essay on "The Electric Telegraph; the Principle of its Construction, and the Advantages that may be expected to result from its introduction into this country."

Successful competitor's name Ardaseer Framji, formerly a teacher in the Elphinstone Institution, now employed in the telegraph department.

His Lordship then distributed the scholarships and prizes of

books to the successful students, after which he addressed the Honorable the President of the Board of Education somewhat to the following effect:—Mr. Warden,—I will now endeavour to express, though I am afraid very imperfectly, the pleasure I have derived from the scene before us, as well as from what I saw at the college on Saturday evening. It cannot but be a source of pride and gratification to see an Institution which bears my own name, and is designated after one who is near and dear to me, and whose name will go down to posterity in connection with the Institution, and which has risen to such a height, and is destined hereafter to exercise so great an influence over this country. I wished to have addressed a little advice to our young friends, but I am afraid it is impossible that they could hear me. But before I conclude I would wish to address a few words to the Principal. I am much gratified to see a gentleman presiding over this Institution who was selected by my uncle, and who has executed his task so successfully. It has given me the greatest pleasure to see you, Mr. Harkness, in your present position. His Lordship repeated his feelings of gratification at the occurrences of the evening, and then sat down amidst great applause. He soon afterwards withdrew.—*Bombay Gazette, 4th April* 1854.

APPENDIX No VI.

COURSE OF STUDY IN THE ELPHINSTONE INSTITUTION FOR 1854.

First Class.

English Reading.—McCulloch's First and Second Books.
Writing.—Progressive Lessons.
Vernacular.—Moral Class Book ; Grammar ; Outlines of Geography.
Arithmetic.—Simple Rules.

Second Class.

English Reading.—McCulloch's Third Book.
Grammar.—Reid's Rudiments of.
Writing.—Figures, Capitals, and Text.
Vernacular.—Geography and History of Maharáshtra ; Grammar.
Arithmetic.—Fractions, Vulgar and Decimal.
Vernacular and English.—Exercises on the Tenses ; School Dialogues.

Third Class.

English Reading.—Chambers' Moral Class Book.
Grammar.—Reid's Rudiments of.
Geography.—Reid's.
Arithmetic.—Thomson's Proportion.
Writing.—Round Hand.
Vernacular.—Introduction to the History of India ; Grammar.
Vernacular and English.—Idiomatic Exercises ; Green's Phrases.

Fourth Class.

English Reading.—McCulloch's Series of Lessons.
Grammar.—McCulloch's.

Geography.—Reid's.
Arithmetic.—Thomson's Interest, Practice, Involution, Evolution.
Writing.—Small Hand.
Vernacular.—History of British India ; Grammar.
Vernacular and English.—Idiomatic Exercises ; Green's Phrases.

II. UPPER CENTRAL SCHOOL.

Fifth Class.

English Reading.—McCulloch's Course of Reading ; Poetry ; Money Matters.
Grammar.—McCulloch's.
Geography.—Nicholl's.
History.—Chambers' History of the British Empire ; Wilson's Universal History.
Geometry.—Euclid, Books I. and II.
Algebra.—Simple Equations.
Writing.—Written Exercises.
Vernacular.—Life of Columbus ; Grammar; History of British India.
Sanscrit.—Shabd Rupavali ; Samas Chakra.

Sixth Class, 2nd Division.

English Reading.—McCulloch's Course of Reading, and Grammar.
Grammar.—McCulloch's.
Geography.—Nicholl's.
History.—Chambers' History of the British Empire; Wilson's Universal History; Taylor's Manual of Ancient History.
Geometry.—Four Books of Euclid.
Algebra.—Quadratic Equations.
Physics.—Matter and Motion (Chambers' Course).
Writing.—Exercises and Translations.

Sanscrit.—Shabd Rupavali; Samas Chakra; Bodhavachan; Laghu Hitopadesh.

Persian.—Amadan Karima; Simple Sentences.

Sixth Class, 1st Division.

(*Candidates for Clare Scholarships.*)

English Language.—McCulloch's Course of Reading; and Grammar.

Geography.—Nicholl's.

History.—Murray's History of India, Chapters i. and ii.; Taylor's Manual of Ancient History.

Mathematics.—Plane Geometry, six Books, with exercises; Young's Quadratic Equations; the application of Logarithms to Interest and Annuities; Plane Trigonometry, Young's (omitting Articles 27, 28, 31).

Physics.—Matter and Motion (Chambers' Course).

Translation.—Written and Oral, into and from the Vernacular.

Sanscrit. } —The same as in the 2nd Division.
Persian. }

III. COLLEGE.

First Year's Students.

English Literature.—Chambers' Cyclopædia.

Logic.—Easy Lessons on Reasoning; Locke's Conduct of the Understanding.

History and Geography.—Heeren's Political System of Europe and its Colonies, A. D. 1492—1555; Murray's India, chaps. iii.—v.; Hughes' (E.) Physical, Political, and Commercial Atlas.

Political Economy.—Mill's Principles, Book I. Chaps. 1—8; Book III. Chaps. 1—6.

Mathematics.—Young's Cubic Equations; Thomson's Spherical Trigonometry; Mathematical Instruments (Weale's Series).

Physics.—Oilebar's Course of Mathematics, Vol. I.

Chemistry.—Fownes' Elementary Chemistry.

Second Year's Students.

English Literature.—Chambers' Cyclopædia.

Mental Philosophy.—Locke's Essay, Introduction, with Books II. and III. (omitting in Book II. chap. i. sects. 10—20; chap. xiii. sects. 10 to the end; chap. xv.; chap. xxi. sects. 11—71; chaps. xxxi. and xxxii.; and in Book III. chap. vi.); Cousin's Psychology, translated by Henry; Method of Philosophical Study, by T. Jouffroy.

History and Geography.—Heeren's Political System of Europe and its Colonies, A. D. 1618—1740. Guizot's English Revolution; Macaulay's Essays: Sir William Temple; Spanish Succession; Lord Clive. Hughes (E.) Physical, Political, and Commercial Atlas.

Political Economy.—Mill's Principles, Books I. and II., chaps. 11—16; Book III. Hancock's Introductory Lecture (1848).

Mathematics.—Waud's Algebraic Geometry; Salmon on Conic Sections.

Physics.—Hydrostatics; Electricity (Chambers' Course).

Chemistry.—Fownes' Elementary Chemistry.

Third Year's Students.

English Literature.—Shakespeare; Bacon's Essays.

Moral Philosophy.—Bishop Butler's Three Sermons on Human Nature; Dissertation on the Nature of Virtue; Stewart's Outlines, Part II.

Induction.—Mill's Logic, Book III.; Whewell.

Political Economy.—Mill's, Books III.—V.

Mathematics.—Young's Differential Calculus.

Physics.—Hart's Mechanics.

Physical Geography.—Hughes'.

Chemistry.—Fownes' Elementary Chemistry.

Botany.—Balfour's Elements.

Fourth Year's Students.

English Literature.—Shakespeare; Bacon's Essays.

Moral Philosophy.—Butler, as in third year, with Analogy, Part I.; Smith's View of Ancient Systems.

Induction.—As in the third year.

Political Economy.—Mill's, Books III.—V.

Mathematics.—Integral Calculus (Weale's Series).

Physics.—Orlebar's Course of Mathematics, Vol. II.; Herschell's Astronomy.

Chemistry.—Fownes' Elementary Chemistry.

Botany.—Balfour's.

(Signed) JOHN HARKNESS, A.M.,
Principal.

Elphinstone Institution,
Bombay, 13th February 1854.

APPENDIX No. VII.

Return of Government Vernacular Schools in the 1st Division, comprising the Collectorates of Poona, Ahmednuggur, Sholapúr, and Khandeish, and the Districts of Satara, under the Superintendence of Máhádeo Govind Shástrí, Esq.

No. of Schools.	When established.	Name of Town or Village.	Estimated Population.	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.		Length of Service.		When last examined.	Remarks. NOTE.—S. denotes School, M. Master.
				On Register.	Present at Examination.								
		Poona. Collectorate.						*Rs.*	*a.*	*Y.*	*m.*		
1	1826	Poona, No. I....	80,000	163	137	Keshava Shivarám	Brahmin ..	25	0	5	6	Aug 1853	S. & M. both good.
						Bálájí Rámchandra	Ditto ..	12	0	1	4	....	A zealous teacher.
						Bháskar Laxumon.....	Ditto ..	5	0	1	1	....	Do. do.
						Náro Vithal Phadke	Ditto ..	5	0	1	1	....	Do. do.
2	1830	Ditto, No. II....		95	95	Hari Rámchandra.....	Ditto ..	15	0	6	1	Do. do.	A first rate teacher.
3	1830	Ditto, No. III. ..		111	93	Venáyek Sakhárám	Ditto ..	20	0	12	11	Do. do.	A second rate teacher.
						Hari Vithal.....	Ditto ..	5	0	1	1	....	Active and intelligent.
4	1830	Talegaum	4,509	70	60	Máhádáji Govind	Ditto ..	12	0	14	11	Nov 1853	Second rate teacher.
5	1844	Chinchúr	2,881	67	60	Moro Bábúrao Apte	Ditto ..	10	0	9	3	Do. do.	S. improving.
6	1842	Shivapúr.....	2,325	67	60	Govind Máhádeo	Ditto ..	10	0	14	0	Do. do.	S. in tolerable order.
7	1826	Sasaúr	6,848	67	60	Vithal Rámchandra	Ditto ..	15	0	14	11	Oct 1852	S. not examined during the year.

No. of Schools.	When established.	Name of Town or Village.	Estimated Population.	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.		Length of Service.		When last examined.	Remarks. Note.—S. denotes School, M. Master.
				On Register.	Present at Examination.								
		Poona Collectorate (continued).						*Rs.*	*a.*	*Y.*	*m.*		
8	1836	Súpe.....	3,513	50	45	Ganesh Káshináth.....	Brahmin..	10	0	17	5	Oct 1852	S. not examined during the year.
9	1847	Baramati	4,000	64	61	Ganesh Hari	Ditto ..	10	0	6	10	Do. do.	Do. do.
10	1836	Indapúr.....	3,311	51	44	Laxumon Atmárám	Ditto ..	10	0	1	1	Do. do.	Do. do.
11	1845	Pimpalvandi	2,900	39	37	Makúnd Trimbak	Ditto ..	12	8	15	11	Nov 1853	S. not in good order.
12	1845	Hivari	1,112	32	31	Govind Náráyan	Ditto ..	10	0	11	5	Do. do.	S. improving.
13	1839	Junir	1,338	97	83	Náro Bálcrishná	Ditto ..	20	0	5	7	Do. do.	S. and M. both good.
14	1839	Ghore	4,555	50	44	Rámchandra Náráyan	Ditto ..	12	0	13	4	Do. do.	S. in tolerable order.
15	1847	Avasari	2,425	45	40	Dámodhar Vishnu.....	Ditto ..	10	0	13	9	Do. do.	S. much improved.
16	1839	Kher.....	2,750	53	49	Govind Ballál Bápat.....	Ditto ..	12	8	17	8	Do. do.	Do. do.
17	1842	Chás.....	1,127	33	32	Bálcrishná Govind	Ditto ..	10	0	11	7	Do. do.	S. and M. both good.
18	1845	Kadús.....	1,084	64	41	Rámchandra Náráyan	Ditto ..	12	0	12	2	Do. do.	Do. do.
						Venáyek Bájáji	Ditto ..	1	4	0	7	Do. do.	An industrious teacher.
19	1848	Chákan	2,500	81	74	Báláji Máhádeo.....	Ditto ..	10	0	5	6	Do. do.	An excellent S. and M.
20	1840	Paud	1,084	35	32	Kondu Chintámon	Ditto ..	10	0	3	0	Do. do.	S. in tolerable order.
		Ahmednuggur Collectorate.											
21	1826	Ahmednuggur, No. I.		127	116	Vásúdeva Bhikáji	Ditto ..	19	8	5	6	Mar 1854	An excellent S. and M.

22	1826	Ditto, No. II.	25,000	95	84	Govind Krishná	Ditto ..	19	8	4	6	Do.	do.	S. much improved.
23	1832	Ditto, No. III.		107	103	Krishnáji Gaoronáth	Ditto ..	14	8	18	1	Do.	do.	Do. do.
24	1845	Karjat	4,000	53	49	Chintámon Vithal	Ditto ..	10	0	1	10	Apr	1854	S. improving.
25	1849	Kharde	6,339	41	37	Rámchandra Balvant	Ditto ..	10	0	5	10	Dec	1852	S. not examined during the year.
26	1841	Jamkhed	3,735	46	38	Pándúrang Sakhárám	Ditto ..	10	0	13	3	Do.	do.	Do. do.
27	1842	Parnair	3,890	51	51	Bálcrishná Govind	Ditto ..	10	0	1	10	Do.	do.	Do. do.
28	1841	Rahuri	2,700	75	73	Keshava Krishná	Ditto ..	10	0	9	9	Mar	1854	S. much improved.
29	1848	Korhale	2,000	51	48	Náro Malhár	Ditto ..	10	0	14	1	Do.	do.	S. in tolerable order.
30	1844	Rahate	2,000	43	39	Raghunáth Rámchandra	Ditto ..	10	0	17	6	Do.	do.	S. in satisfactory state.
31	1846	Puntambe	3,000	70	65	Laxumon Janárdhan	Ditto ..	15	0	12	5	Do.	do.	One of the best S. and M.
32	1846	Kopargaum	2,000	60	53	Vithal Atmárám	Ditto ..	10	0	8	1	Feb	1854	S. in tolerable order.
33	1837	Yoleh	12,259	102	82	Náro Vithal	Ditto ..	19	8	16	9	Do.	do.	S. much improved.
34	1844	Chandvad	5,500	92	86	Báláji Bápúji	Ditto ..	12	8	14	10	Dec	1853	Do. do.
35	1845	Sukene	2,200	40	30	Bháskar Máhádeo	Ditto ..	10	0	6	2	Do.	do.	S. in an unsatisfactory state.
36	1847	Dindori	2,000	45	39	Máhádeo Janárdhan Neneh	Ditto ..	10	0	6	5	Do.	do.	Do. do.
37	1826	Nasik, Maráthi	21,860	257	212	Laxumon Narsing	Ditto ..	24	8	5	6	Do.	do.	Largest and one of the best S. in the division.
						Ráoji Náráyan	Ditto ..	15	0	0	8	....		Industrious teacher.
						Trimbak Purashrám	Ditto ..	6	0	6	7	....		Do. do.
						Krishnáji Rámchandra	Ditto ..	5	0	0	8	....		Do. do.
38	1845	Nasik, Hindustáni.		32	26	Máhomed Hussen	Musalman.	20	0	11	0	Jan	1853	No report received.
39	1836	Trimbak	3,500	73	67	Vámnaji Trimbak	Brahmin ..	10	0	10	9	Dec	1853	S. in satisfactory state.
40	1844	Sinnar	7,000	46	33	Náro Bhikáji	Ditto ..	15	0	27	9	Do.	do.	S. in an unsatisfactory state.
41	1847	Vavi	2,000	46	38	Rámchandra Trimbak	Laud	10	0	4	6	Do.	do.	S. in good order.
42	1834	Sangamner, Mar.	7,495	128	118	Rágho Máhádeo	Brahmin ..	20	0	14	2	Do.	do.	M. and S. both good.
43	1845	Sangamner, Hin.		29	29	Shaik Máhomed	Musalman.	10	0	7	10	Do.	do.	S. in tolerable order.
44	1845	Dandarphal	1,808	36	34	Rámchandra Dinkar	Brahmin ..	10	0	8	3	Nov	1853	Do. do.
45	1832	Akoleh	3,796	85	82	Pándurang Trimbak Bowálkar	Ditto ..	30	0	23	9	Do.	do.	M. and S. both excellent.
46	1838	Kotul	2,209	63	58	Vishnu Vithal	Ditto ..	10	0	4	9	Do.	do.	S. in creditable state.

No. of Schools.	When established.	Name of Town or Village.	Estimated Population.	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.		Length of Service.		When last examined.	Remarks. NOTE.—S. denotes School, M. Master.
				On Register.	Present at Examination.								
		Sholapoor Collectorate.						*Rs.*	*a.*	*Y.*	*m.*		
47	1827	Sholapoor	30,812	91	90	Janárdhan Rámchandra	Brahmin ..	21	0	16	3	Nov 1852	S. not examined during the year.
						Govind Ganesh.....	Ditto ..	10	0	2	8	....	Do. do.
48	1846	Charchan	3,062	37	29	Raghúnáth Trimbak.....	Ditto ..	12	0	8	1	Oct 1852	Do. do.
49	1840	Mangoli	5,000	31	20	Krishnáji Apáji.....	Ditto ..	10	0	13	4	Do. do.	Do. do.
50	1848	Bhagevadi	3,000	22	20	Shaikh Nabu	Musalman .	8	0	5	7	Nov 1852	Do. do.
51	1846	Mudebehal	1,945	35	33	Vishnu Raghunáth	Brahmin ..	10	0	5	2	Do. do.	Do. do.
52	1846	Hipargi, Can.	2,822	60	49	Krishnáji Rámchandra.....	Ditto ..	10	0	5	3	Do. do.	Do. do.
53	1846	Shindgi	2,586	27	26	Raghunáth Eshwant.....	Ditto ..	10	0	5	3	Do. do.	Do. do.
54	1846	Almel	4,100	32	29	Govind Pándúrang	Ditto ..	10	0	8	1	Do. do.	Do. do.
55	1851	Indi	3,152	55	51	Náro Gangádhar	Ditto ..	10	0	8	0	Do. do.	Do. do.
56	1836	Mohol.....	5,000	56	50	Hari Keshava.....	Ditto ..	12	0	18	5	Apr 1854	S. not in a very good state.
57	1836	Madhe.....	4,724	61	51	Bábji Krishná	Ditto ..	15	0	11	6	Do. do.	S. in good order.
58	1849	Vairag.....	9,032	56	50	Náro Raghunáth	Ditto ..	10	0	4	10	Do. do.	Do. do.
59	1831	Barsi	9,807	85	73	Rámcrishna Raghunáth	Ditto ..	20	0	17	6	Do. do.	S. not in a satisfactory state.
60	1846	Karmala	6,000	72	66	Raghunáth Bhúskar.....	Ditto ..	12	8	15	5	Do. do.	S. in good order.
		Khandeish Collectorate.											
61	1826	Dhulia.....	10,669	146	136	Bálcrishna Trimbaka	Ditto ..	25	0	15	5	Jan 1854	One of the best S. and M.

						Vishnu Trimbaka	Ditto ..	12	0	3	11	....	Industrious teacher.
62	1847	Malliganm	7,400	129	127	Bálcrishna Bábáji.....	Ditto ..	20	0	4	6	Jan 1854	One of the best S. and M.
63	1843	Erandole	8,049	90	80	Parshotam Atmárám.....	Ditto ..	12	0	10	4	Do. do.	S. in good order.
64	1846	Jamnair	5,500	65	60	Trimbaka Mahipat	Ditto ..	12	8	8	1	Feb 1854	S. not well managed.
65	1848	Naumpur	2,000	41	41	Máhádoráo Raghunáth	Ditto ..	10	0	11	5	Jan 1854	S. not in satisfactory order.
66	1848	Betavad	2,690	35	30	Ganesh Malhár	Ditto ..	10	0	4	10	Do. do.	S. in tolerable order.
67	1848	Zaikara	2,000	45	44	Rámchandra Venáyek	Ditto ..	10	0	4	10	Do. do.	S. in good order.
		Districts of Satara.											
68	1852	Sattara, No. I....	28,035	110	90	Máhádoráo Rámchandra....	Ditto ..	25	0	2	3	Nov 1853	M. and S. both good.
						Amritráo Hari	Ditto ..	10	0	6	4	....	A tolerable teacher.
69	1853	Ditto, No. II....		103	87	Ganesh Rámchandra..	Ditto ..	10	0	1	1	Sep 1853	S. in good order.
70	1853	Wai	10,980	148	136	Bháu Sakhárám Joshi	Ditto ..	30	0	1	0	Do. do.	A new S. well conducted.
						Vásudeo Chimnáji.....	Ditto ..	12	0	0	7	....	Good teacher.
71	1853	Pandarpur	....	103	..	Shitarám Bálcrishna.....	Maratha ..	30	0	0	5	....	S. lately established.
72	1853	Bijapur	....	87	..	Káshináth Vishvanáth Shástri.	Brahmin ..	30	0	0	5	....	Do. do.
73	1854	Kurar	....	41	..	Ganesh Náráyan Parajpay ..	Maratha ..	30	0	0	1	....	Do. do.

NOTE.—In this division there are also 59 village schools in the Purandhar districts of the Poona collectorate, containing 1757 boys.

APPENDIX No. VIII.

Return of Government Vernacular Schools in the 2nd Division, comprising the Collectorates of Surat, Broach, Ahmedabad, and Kaira, under the Superintendence of James Graham, Esq.

No. of Schools.	When established.	Name of Town or Village.	Estimated Population.	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.		Length of Service.		When last examined.	Remarks. NOTE.—S. denotes School, M. Master.
				On Register.	Present at Examination.								
		Surat Collectorate.						*Rs.*	*a.*	*Y.*	*m.*		
1	1826	Surat No. I.....	90,000	181	143	Tripuráshankar Manishankar.	Brahmin ..	25	0	10	0	Feb 1854	One of the best S. and M.
						Hargovandás Káhándás.....	Vania	5	0	1	1	....	Good teacher.
2	1826	Ditto No. II.		76	61	Pránshankar Umánáth.....	Brahmin ..	19	0	27	0	Do. do.	S. in tolerable order.
3	1843	Ditto No. III.....		60	51	Keshavarám Amritrám.. ...	Ditto ..	15	0	2	3	Do. do.	M. recently appointed.
4	1847	Ditto No. IV.....		102	79	Ratanshankar Manishankar..	Ditto ..	15	0	6	0	Do. do.	An excellent teacher.
5	1848	Ditto No. V.		109	85	Tribhuvandás Mathurádás ..	Vania	19	0	5	0	Do. do.	Do. do.
6	1849	Ditto No. VI.....		86	78	Valabrám Itchárám	Brahmin ..	10	0	6	0	Do. do.	A tolerable do.
7	1848	Ditto No.VII. Hin.		65	50	Abdul Raúf.....	Musalman .	20	0	5	0	Do. do.	S. in tolerable order.
8	1841	Kaliavadi	1,823	50	43	Laxmirám Narotam	Brahmin ..	19	0	17	0	Dec 1853	Do. do.
9	1830	Balsad	7,362	80	72	Shivaprasád Ruprám	Ditto ..	19	0	19	0	Nov 1853	Do. do.
10	1850	Pardi	4,328	62	45	Párvatishankar Durgáshankar	Vania	15	0	3	6	Do. do.	S. in good order.
11	1848	Surbhon	2,035	39	34	Kirpárám Aditrám	Brahmin ..	10	0	5	0	Do. do.	S. not in good order.
12	1847	Bardoli	3,300	53	44	Harnáráyán Náronrám	Ditto ..	15	0	6	6	Do. do.	Do. do.

13	1851	Mandavi	6,000	43	42	Rámnáth Jagonnáth.....	Ditto ..	15	0	2	8	Do. do.	S. in satisfactory state.
14	1830	Mota	2,800	35	33	Prágji Valabji	Ditto ..	15	0	1	2	Do. do.	M. going on well.
15	1849	Rander	9,078	49	36	Shivachrám Ratanrám.....	Ditto ..	10	0	....		Feb 1854	M. recently appointed.
16	1827	Orpad	4,300	60	48	Itchárám Vishvanáth	Ditto ..	19	0	23	0	Dec 1853	M. and S. bad.
		Broach Collectorate.											
17	1826	Broach.....	31,312	147	114	Makúndram Ashárám	Ditto ..	25	0	27	0	Do. do.	S. in good order.
						Jamnádás Vandravandás	Vania	5	0	1	0	....	Tolerable teacher.
18	1830	Anklesar	7,839	69	62	Keshavarám Vishvanáth	Brahmin ..	19	0	22	0	Do. do.	S. not in good order.
19	1833	Ahmod	4,425	84	62	Bhoványinand Ganpatinand...	Ditto ..	19	0	1	0	Do. do.	S. much improved.
20	1830	Jambúsar	12,589	114	87	Vakatrám Ajarámár.....	Ditto ..	19	0	16	0	Do. do.	S. in good order.
21	1853	Hansote	4,000	46	44	Umedrám Itchárám	Ditto ..	19	0	0	10	Do. do.	S. recently established.
		Ahmedabad Collectorate.											
22	1826	Ahmedabad No. I.	100,000	240	198	Tuljárám Sukrám.....	Ditto ..	30	0	27	0	Jan 1854	A large and good S.
						Hargovand Narsingrám	Ditto ..	5	0	4	0	....	Promising young teacher.
						Sukalchand Vithaldás	Vania	3	0	1	7	....	Do. do.
						Chugan Máháshankar	Brahmin ..	2	0	1	7	....	Do. do.
23	1826	Ditto No. II.		102	89	Máhádhurám Ambárám	Ditto ..	15	0	23	0	Do. do.	S. in tolerable order.
24	1848	Ditto No. III.		139	117	Ranchod Amichand	Kunbi.....	19	0	7	0	Do. do.	S. in good order.
25	1849	Ditto No. IV.		161	150	Lálbhái Ruprám	Brahmin ..	20	0	4	0	Do. do.	One of our best S. and M.
						Ashárám Motirám.....	Ditto ..	5	0	2	7	....	Tolerable teacher.
26	1827	Dholka.....	19,971	98	79	Nathubhái Ghelábhái	Ditto ..	10	0	6	0	Do. do.	S. in good order.
27	1847	Dholera	7,000	72	66	Ruprám Ashárám.....	Ditto ..	10	0	5	0	Do. do.	Do. do.
28	1830	Danduka	7,000	89	77	Jagonnáth Girjáshankar.....	Ditto ..	19	0	23	0	Do. do.	M. and S. both good.
29	1852	Bhaonaggar.....	4,000	83	52	Ugreshwar Ajarámár	Ditto ..	20	0	2	0	Do. do.	S. in satisfactory state.
		Kaira Collectorate.											
30	1826	Kaira	1,291	136	120	Ganpatrám Nathurám.....	Ditto ..	18	8	0	11	Dec 1853	S. and M. both good.

No. of Schools.	When established.	Name of Town or Village.	Estimated Population.	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.	Length of Service.	When last examined.	Remarks. Note.—S. denotes School, M. Master.
				On Register.	Present at Examination.						
		Kaira Collectorate (continued).						*Rs. a.*	*Y. m.*		
31	1826	Nariad.....	20,782	277	250	Tuljárám Somnáth	Brahmin ..	25 0	13 0	Dec 1853	Largest and one of the best S. in the division.
						Dahyábhái Khándás.....	Ditto ..	5 0	0 6	....	Promising young teacher.
						Dahyábhái Narbhairám	Ditto ..	5 0	0 4	....	Tolerable teacher.
32	1838	Matar	4,500	85	74	Parshotam Venirám	Ditto ..	10 0	6 0	Do. do.	S. going on well.
33	1848	Mehmedabad	7,240	68	60	Govindrám Harirám.....	Ditto ..	15 0	4 0	Do. do.	An excellent teacher.
34	1830	Mahuda	9,400	103	95	Laxmirám Brijlál	Ditto ..	18 8	13 0	Do. do.	M. negligent.
35	1830	Umrat	13,652	113	93	Laxmináráyán Shivanáráyan.	Ditto ..	18 8	3 0	Jan. 1854	S. unsatisfactory.
36	1830	Kapadvanj	12,428	58	54	Ghelábhái Jagjivan	Ditto ..	18 8	9 0	Do. do.	An excellent teacher.

APPENDIX No. IX.

Return of Government Vernacular Schools in the 3rd Division, comprising the Collectorates of Tanna, Rutnagiri, Belgaum, and Dharwar, under the Superintendence of F. P. Baker, Esq.

No. of Schools.	When established	Name of Town or Village.	Estimated Population	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.		Length of Service.		When last examined.	Remarks. NOTE.—S. denotes School, M. Master.
				On Register.	Present at Examination.								
		Tanna Collectorate.						*Rs.*	*a.*	*Y.*	*m.*		
1	1822	Tanna	11,150	17	14	Náráyán Bábácháryá	Brahmin ..	20	0	2	8	Dec 1853	S. not in a very good condition.
2	1830	Kalian	7,000	160	148	Sakhárám Shivarám.....	Ditto ..	19	8	10	11	Jan 1854	S. much improved.
3	1833	Bassein	6,615	124	95	Dáji Moreshwar.....	Ditto ..	15	0	20	11	Dec 1853	S. in good order.
4	1839	Mahad	5,000	120	107	Káshináth Bápuji Ok	Ditto ..	12	0	13	11	Jan 1854	S. much improved.
5	1831	Panvel, Mar.	7,000	108	91	Káshináth Krishná	Ditto ..	19	8	14	11	Dec 1853	S. in tolerable order.
6	1840	Ditto, Hind.		37	35	Syud Mahomed	Musalman.	10	0	0	2	Do. do.	Worst S. in this collectorate.
7	1840	Mahim.....	4,000	122	116	Govind Dinkar Chitle	Brahmin ..	15	0	13	10	Jan 1854	S. in good order.
						Gopál Sakarám.....	Ditto ..	6	0	1	9	....	Competent and attentive.

No. of Schools.	When established.	Name of Town or Village.	Estimated Population.	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.		Length of Service.		When last examined.	Remarks. Note.—S, denotes School. M. Master.
				On Register.	Present at Examination.								
		Rutnagiri Collectorate.						*Rs.*	*a.*	*Y.*	*m.*		
8	1823	Rutnagiri, No. I..	8,100	210	194	Gangádhar Rámchundra	Brahmin ..	25	0	12	6	Feb 1854	One of the best S. and M.
						Bápuji Govind Abhiankar ..	Ditto ..	10	0	1	3	....	A competent teacher.
						Gopál bin Raghushett	Vani.....	6	0	2	2	....	Do. do.
						Vásudeva Luxumon Limaya..	Brahmin ..	6	0	1	11	....	Do. do.
9	1823	Ditto, No. II..		285	242	Shivárám Bháskar Káne....	Ditto ..	18	0	11	2	Do. do.	The largest and one of the best S. we have.
						Antáji Babji Joshi.....	Ditto ..	5	0	1	10	....	A competent teacher.
						Vámanáji Vithal Goreb.....	Ditto ..	3	0	1	6	....	Do. do.
10	1843	Harnai.....	7,200	95	83	Vishvanath Vishnu	Ditto ..	15	0	5	0	Jan 1854	S. in good order.
11	1834	Murud.....	1,500	66	58	Venáyek Govind.....	Ditto ..	10	0	11	11	Do. do.	S. much improved.
12	1847	Jalgaum	2,700	79	75	Vásudeva Keshava.....	Ditto ..	10	0	5	10	Do. do.	S. in tolerable condition.
13	1843	Palgad.....	2,100	77	67	Bápu Sona Sáwant	Maratha ..	12	0	6	5	Do. do.	S. in a satisfactory state.
14	1843	Khed	2,200	118	93	Sakhárám Nilkant.....	Brahmin .	10	0	8	10	Do. do.	S. much improved.
15	1833	Chiplún	6,000	173	146	Parshotam Janárdhan	Ditto ..	19	8	5	6	Do. do.	S. in good order.
						Vishnu Prabákar	Ditto ..	3	0	0	11	....	Attentive.
16	1834	Dabhol	3,000	140	126	Rámji bin Hari Agáshe	Maratha ..	12	8	6	0	Do. do.	A very good S.
17	1849	Anjanwel.....	2,100	57	57	Vamnáji Govind.....	Brahmin ..	10	0	6	6	Do. do.	S. in good order.
18	1837	Gohagar.....	2,053	108	93	Rágho Sakhárám Kháre.....	Ditto ..	15	0	11	1	Feb 1854	Do. do.
						Ganesh Dhondeo Káne.....	Ditto ..	5	0	1	0	....	Attentive.

19	1831	Rajapúr	6,100	114	92	Dhondu Vithoji Amrite.....	Maratha ..	12	0	6	5	Do.	do.	S. in tolerably good order.
20	1841	Malwan	10,000	173	129	Vithal Moreshwar.....	Brahmin ..	10	0	6	9	Do.	do.	A very large and good S.
21	1843	Someshwar.....	1,500	42	35	Náro Máhádeva Phadke	Ditto ..	15	0	6	5	Do.	do.	Worst S. in this Collectorate.
22	1844	Vingurla.....	5,000	112	102	Máhádeva Laxumon.....	Ditto ..	15	0	5	6	Do.	do.	S. in an unsatisfactory state.
23	1847	Pawas	2,600	71	64	Murári Bhámshet Bede	Vani ..	10	0	3	7	Do.	do.	S. much improved.
24	1848	Palshet	2,250	78	71	Keshava Vithal	Brahmin ..	10	0	5	9	Do.	do.	Do. do.
25	1851	Malgund.....	2,100	126	110	Bháu Abáshet.....	Shimpi ..	10	0	9	10	Do.	do.	An excellent S.
		Belgaum Collectorate.												
26	1830	Belgaum, Mar....	16,150	238	210	Náro Rámchandra Jámbheker.	Brahmin ..	25	0	13	6	Mar	1854	Best S. in the Collectorate.
						Náro Rámchandra Dátár....	Ditto ..	12	0	4	6	....		Gives satisfaction.
						Káshináth Keshava Gudre ...	Ditto ..	5	0	1	6	....		Do. do.
27	1838	Ditto, Can....		132	118	Janárdhan Krishná.....	Ditto ..	15	0	15	11	Do.	do.	A good S.
28	1838	Sampgaum.....	2,400	59	54	Laxumon Rámji.	Maratha ..	12	8	5	11	Oct	1853	S. much improved.
29	1838	Bailhongol	6,000	93	76	Parvayyá bin Lingayyá	Lingayat ..	12	8	13	8	Do.	do.	S. in a satisfactory state.
30	1840	Gokak	13,000	87	79	Baláji Gopal	Brahmin ..	12	0	6	1	Sep	1853	Do. do.
						Raoji Balcrishna	Ditto ..	4	0	2	3	....		A competent teacher.
31	1841	Sadalga	5,190	84	82	Kashinath Yedneshwar	Ditto ..	12	8	9	4	Do.	do.	A very good S.
32	1849	Jambuti	2,400	43	27	Jairam Yedneshwar	Ditto ..	10	0	1	9	Do.	do.	S. not in a satisfactory state.
33	1843	Khanapúr	3,690	82	80	Naro Trimbak	Ditto ..	10	0	5	10	Oct	1853	S. in tolerable order.
34	1838	Savadati	6,000	89	76	Prabhu bin Subhanji	Maratha .	9	0	5	11	Do.	do.	Do. do.
35	1844	Itgi	23,000	47	43	Verupaksh Pawadeshwar	Brahmin ..	9	0	0	11	Mar	1854	Worst S. in this Collectorate.
36	1838	Bidi.....	2,200	85	83	Swamirao Venkatesh.....	Ditto ..	10	0	6	4	Oct	1853	S. much improved.
		Dharwar Collectorate.												
37	1826	Dharwar, Mar....	24,000	168	139	Balcrishna Mahadeva	Ditto ..	30	0	27	10	Mar	1854	Best and largest S. in the Collectorate.

No. of Schools.	When established.	Name of Town or Village.	Estimated Population.	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.	Length of Service.	When last examined.	Remarks.
				On Register.	Present at Examination.						NOTE.—S. denotes School, M. Master.
								Rs. *a.*	*Y.* *m.*		
		Dharwar Collectorate (continued).									
						Govind Prabhakar	Brahmin	10 0	1 6	....	Gives satisfaction.
						Ramchandra Abaji Kerre	Ditto	4 0	0 2	....	Do. do.
						Dhondu Dattátraya	Ditto	4 0	1 10	....	Do. do.
						Malhári Keshava	Ditto	2 0	1 8	....	Do. do.
38	1835	Dharwar, Can	24,000	110	84	Shivarudrayá bin Gurulingayá	Lingayat	12 0	8 10	Mar 1854	S. in pretty good condition.
						Bhimáji Timáji	Brahmin	3 0	4 11	....	Gives satisfaction.
39	1846	Morab	3,470	53	51	Ghudusing bin Shivarámsing	Rajput	10 0	8 9	Oct 1853	S. in tolerable condition.
40	1844	Navalgund	8,000	115	109	Krishnáji Keshava Súne	Brahmin	8 0	2 8	Do. do.	Do. do.
41	1826	Hubli, Mar	26,000	144	114	Vishnu Babji Sáne	Ditto	20 0	16 11	Nov 1853	Do. do.
						Krishnaji Shivaram Kelkar	Ditto	4 0	....	....	A competent teacher.
42	1835	Ditto, Can		103	88	Hunmant Jivaji	Ditto	10 0	10 1	Do. do.	S. improved.
43	1846	Bankapúr	4,450	59	50	Gangadhar Madvaleshwar	Lingayat	10 0	6 1	Do. do.	Do. do.
44	1844	Hangal	4,880	89	68	Rachotappa bin Gurubasweshwar	Ditto	10 0	8 2	Do. do.	S. in a satisfactory state.
45	1836	Ranibinur	10,000	86	74	Bhimaji Balaji	Brahmin	15 0	11 11	Do. do.	S. in tolerable condition.
						Virupatsh Sesho	Ditto	3 0	1 11	Do. do.	Not very efficient.
46	1848	Kalghatgi	2,800	66	56	Antaji Vittal Godbole	Ditto	10 0	4 10	Oct 1853	S. in an unsatisfactory state.
47	1846	Misrikote	2,000	54	45	Ramchandra Madhusa	Khatri	10 0	5 10	Do. do.	S. much improved.

APPENDIX No. X.

Return of Vernacular Schools in the Province of Katiawar, under the Superintendence of Bhogilál Pranwalabdás, Esq.

No. of Schools.	When established.	Name of Town or Village.	Estimated Population.	No. of Pupils: On Register.	No. of Pupils: Present at Examination.	Name of Master, and Assistant Master.	Caste.	Pay per Measem.	Length of Service.	When last examined.	Remarks. NOTE.—S. denotes School, M. Master.
								Rs. a.	*Y. m.*		
1	1853	Rajkote	6,000	234	232	Dúrgárám Mancháram	Brahmin ..	75 0	27 7	Oct 1853	M. transferred from Surat Vernacular school No. 1.
						Trimbakuáth Rámnáráyan ..	Ditto ..	25 0	0 11	....	M. ditto Rajkote Govt. school.
2	1852	Junagad	28,950	86	64	Pránlál Mathurádas	Khatri ..	110 0	2 8	Feb 1854	M. ditto Elphinstone Institution.
						Keshavrám Dhirajrám.....	Brahmin ..	15 0	1 6	....	Newly appointed.
						Balvantrae Dinánáth	Khatri ..	15 0	0 3	....	Do. do.
3	1853	Nava Nagar	35,968	150	..	Gulábdás Brijbhukandás.....	Vania ..	50 0	0 11	....	M. lately appointed.
4	1854	Vadhvan	16,000	75	..	Pandulál Mohanlál	Kayat ..	50 0	0 11	....	Do. do.
5	1854	Dhoraji	13,700	60	..	Gopálji Surbhái.....	Brahmin ..	50 0	0 5	....	Do. do.
6	1854	Morbi	14,333	115	..	Sevakrám Rájárám	Ditto .	25 0	0 11	....	Do. do.
7	1851	Nagnesh	1,500	3	..	Motilál Mádhurae	Ditto ..	30 0	2 9	Oct 1853	M. good.
8	1851	Chuda	1,800	5	..	Dolatram Uttamram.....	Ditto ..	50 0	2 6	Do. do.	Ditto.
9	1853	Gondal.....	8,500	13	..	Sukhdevaram Aditram	Ditto ..	50 0	0 11	Do. do.	Ditto.
10	1851	Rajkote	6,000	9	..	Dharamsi Shamji	Lavana ..	15 0	3 4	Do. do.	M. indifferent.
11	1853	Lakhtar	1,339	15	..	Ganpatram Rajaram.....	Brahmin ..	35 0	0 10	Do. do.	M. transferred from Rajcote Government school.
12	1854	Vankaner	4,575	15	..	Umiáshankar Raghunáth....	Ditto ..	15 0	0 3	Not exd.	M. newly appointed.

NOTE.—The six last Schools are supported wholly by the Chiefs of the towns named.

APPENDIX No. XI.

Return of Vernacular Schools at the Presidency, under the Superintendence of John Harkness, Esq., A.M.

No. of Schools.	When established.	Where situated.	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.		Age.	Length of Service.		When last examined.	Remarks. NOTE.—S. denotes School, M. Master.
			On Register.	Present at Examination.			Rs.	a.	Y.	Y.	m.		
1	1824	Esplanade, Mar....	88	83	Náráyan Vishvanáth Shástri ...	Brahmin ..	30	0	44	20	9	Nov 1853	S. in good order.
					Bhikáji Bhaskar	Ditto ..	25	0	30	20	1	....	Gives satisfaction.
					Venayek Eshvant	Ditto ..	18	0	30	13	8	....	Do. do.
					Sakharam Vasudeva Shástri	Ditto ..	12	0	32	3	5	...	Do. do.
2	1836	Kumbhar Tukdi, do.	105	97	Mahadeo Hari	Ditto ..	18	0	30	9	4	Do. do.	S. in good order.
					Ramchandra Trimbak	Ditto ..	7	0	23	2	3	....	Gives satisfaction.
3	1833	Vithal Vadi, do.....	42	38	Janardhan Narayan	Ditto ..	20	0	34	15	4	Do. do.	S. in good order.
4	1846	Mallim, do.....	33	30	Moreshwar Vishvanáth.....	Ditto ..	10	0	35	7	4	Do. do.	S. in tolerable order.
5	1826	Esplanade, Guj.....	129	119	Mayaram Shambhunath.....	Ditto ..	30	0	24	2	10	Do. do.	S. in good order.
					Chumanlal Nandlal	Kayat ..	15	0	27	7	9	....	Gives satisfaction.
					Pranshankar Dayashankar	Brahmin ..	10	0	45	3	5	....	Do. do.
					Dinanath Shambhunath	Ditto ..	10	0	26	5	7	....	Do. do.
6	1836	Paidhoni, do.	47	38	Balgovind Bhagvandas.....	Vania ..	15	0	38	21	1	Do. do.	S. in an unsatisfactory state.
7	1834	Kazi Street, Hin....	30	28	Mahomed Husein Khat Khote..	Mussalman.	25	0	41	19	0	Do. do.	S. in tolerable order.

APPENDIX No. XII.

Return of Students appointed to the Public Service, in accordance with Rule 8 of the Government Notification of May 20th, 1852.

Names.	Where Educated.	On what Salary.	In what Office.
Raghavendra Ashvath	Dhulia Vernacular School No. I.....	10	In the Adalat at Dhulia.
Kanu Vishvanath	Rutnagiri Vernacular School No. I.	9	In Collector's Office, Rutnagiri.
Balvant Babji.....	Ahmednuggur Vernacular School No. I..	10	In the Cutcheri of the Mamlutdar of Karda, Ahmednuggur Collectorate.
Ramchandra Balaji Sirjori	Dharwar Canarese School	10	In the Huzur Kutcheri of the Collector of Dharwar.

APPENDIX No. XIII.

LETTER FROM GOVERNMENT, FORWARDING A REPORT BY THE MEDICAL BOARD ON THE RESULTS OF THE ESTABLISHMENT OF THE GRANT MEDICAL COLLEGE.

No. 3894 of 1853.

General Department.

To the Secretary to the Board of Education.

Sir,

I am directed to forward copy of a letter from the Medical Board, giving a highly gratifying account of the entire success of the efforts hitherto made to impart Medical Science to the Natives of this country.

2. I am to request that it may be published as an appendix to the Report of the Board of Education for the present year.

I have the honour to be, Sir,

Your most obedient Servant,

(Signed) C. J. Erskine,

Acting Secretary to Government.

Bombay Castle, 19th November 1853.

No. 1979 of 1853.

To the Secretary to Government,

General Department.

Bombay, Medical Board Office, 10th October 1853.

Sir,

In acknowledging the receipt of your letter No. 3193, dated the 27th ultimo, and its accompanying extract of despatch from

the Honorable Court of Directors, No. 24, dated 13th July last, I am directed by the Medical Board to state, that having given the remarks of the Honorable Court their best consideration, they are of opinion that no necessity at present exists "for the employment for a time of one or more of the Sub-Assistant Surgeons visiting some of the principal towns in succession, and, during a longer or shorter sojourn, affording to the inhabitants the opportunity of having medical advice and medicines free of charge." If, hereafter, matters were to follow a different course from that which up to this time has existed, and that there were neither demands for the services of Sub-Assistant Surgeons nor for the establishment of dispensaries of the first and second kinds, then would it become highly expedient, in fact necessary, to adopt the propositions of the Honorable Court to establish, for a time, in some of the principal towns in succession, dispensaries of the third kind, that is, those of which the entire cost is borne by Government.

2. So far, however, from there being any difficulty in providing for the Graduates or Sub-Assistant Surgeons, it is the fact, that if at present a demand from any quarter for a servant of the latter class were to be made, there would be no possibility of complying with it, inasmuch as there is not one now available, all in the Government service, seven in number, being usefully and fully employed in the situations to which the Government have been pleased to nominate them.

3. With the view of enabling the Honorable Court to fully appreciate the immense advantages which already, as it seems to the Medical Board, begin to flow from the establishment of the Grant Medical College, and from the location in the midst of their countrymen of well-educated Native Medical men, the Medical Board beg in a few paragraphs to submit a brief history of the three different batches of Graduates who have issued from the Grant Medical College.

4. In April 1851, eight Graduates received the diploma. Of these, three, viz. Messrs. Bhau Daji, Merwanji Sorabji, and Burjorji Dorabji, declined Government employment, and established themselves in independent practice in Bombay. The remaining five, viz. Messrs. S. A. D'Carvalho, J. C. Lisboa,

Ananta Chandroba, P. F. Gomes, and Atmárám Pándurang, were appointed Sub-Assistant Surgeons, and entered into the employment of Government.

5. Mr. Carvalho and Mr. Lisboa were attached to the Grant College and Jamsetjee Jejeebhoy Hospital, the first to examine the junior classes in chemistry and materia medica, the second to examine the junior classes in anatomy, and both to do duty in the hospital. They have continued since in the discharge of these duties; their assistance in the College has been very useful. They have each charge of two wards in the hospital, and one assists in the male and the other in the female dispensary. In these hospital and dispensary duties, they have been found most efficient and trustworthy. They are not precluded from private practice, and it is very probable that before long they will be disposed to give up Government employment, and depend on their own exertions.

6. Mr. Ananta Chandroba was in the first instance attached to the dispensary at Indore; his services were then transferred to the Government of India for employment with the Bheel Corps, and to take medical charge of the station of Bhopawur. He has given every satisfaction.

7. The people of Bandora in Salsette, in conjunction with those of the adjoining town of Mahim, established a dispensary of the second kind, that is, one, of which half the cost is borne by Government and half by the community, and applied for Mr. Gomes to be appointed to the medical charge. He continued there (the daily attendance in the dispensary being from 40 to 50 exclusive of in-patients) till the 29th June 1853, when he resigned his Sub-Assistant Surgeoncy and established himself in independent practice in Bombay, on the solicitation of residents who had been in the practice of visiting Bandora.

8. Mr. Atmárám Pándurang was for some time attached to the Jamsetjee Jejeebhoy Hospital, and was entrusted with the charge of one or two wards, the duties of which he conducted with perfect satisfaction. He was then appointed to the temporary charge of the vaccinating duties in the Konkun, and performed these duties likewise satisfactorily. On the death of an old Native practitioner of repute, he was recommended by

his friends to resign the Government service, and establish himself in Bombay. This he did on 14th July 1852.

9. In April 1852, five Graduates received diplomas. Two, Messrs. Dosabhai Bazunji and Narayan Daji, declined Government employment and established themselves in practice in Bombay, the second in association with his brother Mr. Bhau Daji, a Graduate of the preceding year.

10. Three, Messrs. Mancherji Sorabji, Sudasheo Hemraz, and Balcrishna Chintoba, became Sub-Assistant Surgeons and entered into the employment of Government. They were all attached to the Jamsetjee Jejeebhoy Hospital for a few months; then the services of Mancherji Sorabji were transferred to the Government of India, and he was appointed to the medical charge of Kotree in Meywar, and that of a detachment of a Bheel Corps stationed at that place.

11. Mr. Sudasheo Hemraz was appointed to the Residency medical duties in Kutch.

12. Mr. Balcrishna Chintoba was appointed to the charge of a dispensary of the second kind at Poona, which had been recently established there, and was supported, as has been stated, partly by the inhabitants, and partly by Government.

13. In April 1853, three Graduates received diplomas: one, Mr. Ardaseer Jamsetji, established himself in practice in Bombay; one, Mr. Nusservanji Bomanji, died, his intention having been also to practice in Bombay; the third, Mr. Ruttonji Beiramji, became a Sub-Assistant Surgeon, was attached to the Jamsetjee Jejeebhoy Hospital for two or three months, and then succeeded Mr. Gomes in charge of the Bandora dispensary.

14. Of the fifteen existing Graduates of the College, seven are in Government employment, viz. two engaged in educational and medical duties in the Grant Medical College and Jamsetjee Jejeebhoy Hospital, Bombay; two in medical charge of dispensaries of the second kind (that is in part self-supporting) at Bandora and Poona; one in charge of the Residency duties and Ráo's Dispensary at Bhooj in Kutch; and two employed under the Supreme Government at Bhopawur and Kotree in Meywar. Eight are in independent practice in Bombay, all of them satisfied with their success, and earning incomes, it is believed, of from Rs. 200 to Rs. 600 a month.

15. Two gratuitous dispensaries have been established in the Native part of Bombay, in populous districts, apart from the already existing institutions of the same kind. They are both entirely self-supporting, and quite independent of any assistance from Government. One is in the Fort, supported by subscription, chiefly among the Parsees. It was set on foot through the activity of Mr. Burjorji Dorabji, a Graduate of 1851, established in practice. He is its Medical Executive Officer. The Professor of Medicine in the Grant Medical College, and the Professor of Surgery, are the Consulting Physician and Surgeon. It has been opened not quite a year, and upwards of 5,000 sick have been already treated there. There is a daily attendance of between 80 to 100.

16. The other is at Nagdévi; it is supported entirely at the expense of a Parsee gentleman whose name is unknown to the public. The active agents are Mr. Bhau Daji and his brother Mr. Narayan Daji. It has been opened not quite four months. The average daily attendance is about 120. In this dispensary, attention has been directed to the substitution of the cheaper indigenous drugs for the more expensive ones of the pharmacopæia.

17. Both these independent charitable institutions are conducted on the same system as the dispensaries of the Jamsetjee Jejeebhoy Hospital, and of other hospitals and places, and with as much regularity. The hours are from 7 A. M. till the patients are all prescribed for. The arrangement for the custody of the medicines and for dispensing them are ample, orderly, and cleanly. The patients are all registered.

18. A Medical Society of the Graduates has been established in connection with the Grant College, for the discussion of papers, and mutual improvement. To this Society the returns of self-supporting dispensaries, with which its members are connected, are to be regularly made, and through this channel the papers of these institutions, which are independent of the Government, will reach the Medical Board.

19. In connection with the Society, a Medical Book Club is established; the best English medical periodicals are regularly received overland, and circulated to the members resident in Bombay.

20. From this detail, the Board think it will be apparent

that the intentions of Government and the Honorable Court are being fully carried out, and that at present nothing more is necessary than to continue in the system just described. If, however, at any time hereafter, the very liberal and humane propositions of the Honorable Court, now reported on, should become necessary, the Medical Board will not fail to address Government on the subject, and to submit the propositions which may then seem desirable.

I have the honour to be, Sir,
Your most obedient Servant,
(Signed) F. MANISTY, Assistant Surgeon,
Secretary Medical Board.

(True copy)
(Signed) C. J. ERSKINE,
Acting Secretary to Government.

APPENDIX No. XIV.

LETTER FROM GOVERNMENT, FORWARDING THE REPORT OF THE GOVERNMENT EXAMINER OF THE GRANT MEDICAL COLLEGE.

No. 1522 of 1854.

General Department.

To the Secretary to the Board of Education.

Sir,

I am directed by the Right Honorable the Governor in Council to forward, for the information of the Board, the accompanying copy of a letter, and of its accompaniments, from Dr. McLennan, reporting the result of the last Examination of Graduates of the Grant Medical College, and of my reply of this date.

2. It is requested that these documents may be published in the next Annual Report of the Board of Education.

I have the honour to be, Sir,
Your most obedient Servant,
(Signed) C. J. Erskine,
Secretary to Government.

Bombay Castle, 29th April 1854.

No. 1521 of 1854.

General Department.

To J. McLennan, Esq., M.D.,
Physician General.

Sir,

The Right Honorable the Governor in Council desires me to acknowledge your letter of the 8th instant, reporting the result

of the examinations of the students of the Grant Medical College for the Session of 1853-54.

2. This report, like the preceding, is regarded as highly gratifying and satisfactory ; and I am directed to convey to you, and to the gentlemen who acted as Assessors on the occasion, the thanks of Government for the assistance which you have been good enough to render.

3. The Governor in Council requests that you will also express to the Principal and Professors of the Grant Medical College the satisfaction which Government have derived from a perusal of your report, and the high sense they entertain of the zeal, ability, and success with which the duties of instruction have been conducted in the College.

4. In accordance with your recommendation, the Governor in Council is pleased to appoint

Ruttonji Hormasji,
Shamrao Narayan,
Moreshwar Junardhan, and
Balcrustna Suckaram,

to be Sub-Assistant Surgeons on the Medical Establishment of this Presidency.

5. A copy of your report has been furnished to the Board of Education, and, with its accompaniments, will be printed in their next Annual Report.*

I have the honour to be, Sir,
Your most obedient Servant,
(Signed) C. J. ERSKINE,
Secretary to Government.

Bombay Castle, 29th April 1854.

(True copy)
(Signed) C. J. ERSKINE,
Secretary to Government.

The documents alluded to will be found in Appendix P, at page xlviii of the annexed Report of the Grant Medical College.

APPENDIX No. XV.

GOVERNMENT NOTIFICATION ADMITTING THE EDUCATIONAL DEPARTMENT TO THE BENEFIT OF PENSIONS.

GENERAL DEPARTMENT.

The following Extract from the Proceedings of the Governor General of India in Council, containing a Despatch from the Honorable the Court of Directors relating to the grant of Pensions, under the Rules of 1831, to Officers in the Educational Department, is published for general information :—

No. 2422.

Extract from the Proceedings of the Most Noble the Governor General of India in Council, in the Financial Department, under date the 2nd September 1853.

Read the following Despatch from the Honorable the Court of Directors, No. 23 of 1853, dated the 20th July, admitting the Servants of Government employed in the Educational Department to the benefit of the General Pensionary Regulations of 1831 :—

FINANCIAL DEPARTMENT.

No. 23 OF 1853.

Our Governor General of India in Council.

1. In the year 1846 you recommended the admission of the Servants of Government employed in the Educational Department to the benefits of the General Pensionary Regulations of 1831.

2. Before deciding upon the question, we required to be furnished with Returns of the Educational Institutions at the

several Presidencies, to enable us to ascertain the expense of the measure which you had submitted to us. These Returns were rendered in your letter of the 30th May 1818, and it appeared from them that the probable charge to the State for pensions would amount to about Rupees 20,000 per annum on the strength of the Educational Establishment as existing at that time. Your financial position was then so unpromising that, viewing the proposal, as we were compelled to do, solely on financial grounds, we felt it necessary to postpone the boon which, on all other considerations, we should willingly have conceded to the Educational Servants.

3. In our Despatch in this Department dated 17th September 1851, No. 50, in reply to a Memorial from the body of Educational Servants employed in the North-Western Provinces, we expressed our regret that we were still prevented, by financial considerations, from complying with their request for the grant of pensions on retirement.

4. Our attention has again been given to the subject, and we have resolved now to withdraw the restriction as respects this valuable class of Public Servants, and to sanction their being admitted to participate in the privileges of the Pension Rules of 1831. We have also determined, with a view of showing our estimation of the importance of their services, that the Principals and Head Masters of Colleges or Schools shall be ranked in the same Class with Law Officers and Native Judges, and, in like manner with them, be qualified, if incapacitated by age or infirmity, to receive pensions equivalent to one-third of their average monthly salary after fifteen years' service, and to one-half after a service of twenty-two years or upwards. This privilege must be confined to Principals and Head Masters. With regard to all other Educational Servants, a service of twenty years will be a necessary qualification for the minimum rate of pension.

Vide Clause 3, Rule V. of the Pension Rules of 1831.

5. The pensions are to be granted only to Servants attached to those Institutions that are wholly or for the greater part supported by our respective Governments, and not to those supported from other sources; and pensions are not to be conceded to

any class of persons inferior to those embraced in the abstract contained in your letter of 30th May 1848, above referred to, the total number of which was at that time 559 persons.

We desire that a copy of the foregoing paras. be transmitted to the Governments of Madras and Bombay, and to the Lieutenant Governor North-Western Provinces, for their information and guidance.

We are, &c.,
(Signed) Russell Ellice,
„ J. Oliphant,
And other Directors.

London, the 20th July 1853.

Ordered, that a copy of the Despatch above adverted to be forwarded to the Governments of Bengal, Madras, and Bombay, and to the Lieutenant Governor of the North-Western Provinces, for their information and guidance, with the intimation that Superannuation Pensions are to granted only to those Servants attached to the Educational Department who receive Salaries above ten rupees per mensem, as laid down in the Pension Regulations of 1831, which are adverted to by the Honorable Court in their Despatch above mentioned; Medical and Military Servants employed in the Educational Department being excluded from the benefits of the Pension Rules in question.

Ordered also, that a copy of the same Despatch be transmitted to the Civil Auditor, for his information and guidance.

(A true Extract)
(Signed) C. Allen,
Secy. to the Govt. of India.

By order of the Right Honorable the Governor in Council,
C. J. Erskine,
Acting Secretary to Government.

Bombay Castle, 4th January 1854.

APPENDIX No. XVI.

REPORTS OF NATIVE LIBRARIES AT AHMEDABAD AND TANNA.

NATIVE LIBRARY AT AHMEDABAD.

No. 105 of 1854.

Judicial Department.

To the Secretary of the Board of Education,

Bombay,

Sir,

I have the honour to submit, to be laid before the Board, the accompanying original statement relative to the Ahmedabad Native Library.

I have the honour to be, Sir,
Your most obedient Servant,

(Signed) A. K. Forbes,
Acting Judge.

Ahmedabad Court of Adawlut, 23rd February 1854.

Return for the year 1853, *showing the state of the Gujerat Vernacular Society's Native Library at Ahmedabad.*

Books.	No. of Books on the 31st Dec. 1852.	Number remained during the year 1853.	Total Number on the 31st Dec. 1853.	Readers.	Number of readers on the 1st Jan. 1853.			Number admitted during the year 1853.			Number left during the year 1853.			Number remaining on the 31st Dec. 1853.		
					English Readers.	Gujerati Readers.	Total.	English Readers.	Gujerati Readers.	Total.	English Readers.	Gujerati Readers.	Total.	English Readers.	Gujerati Readers.	Total.
English	457	142	599	Brahmins	12	3	15	5	1	6	9	1	10	8	3	11
Gujerati	139	16	155	Shrawaks	5	3	8	5	4	9	4	5	9	6	2	8
Marathi	81	7	88	Missury	2	..	2	2	4	6	..	3	3	4	1	5
Urdu	30	0	30	Parvus	2	..	2	2	..	2	4	..	4	..	..	..
Persian	13	0	13	Kunbi	1	1	2	..	..	..	1	1	2	..	..	..
Canarese	3	0	3	Kshatri	..	4	4	1	3	4	..	6	6	1	1	2
Manuscripts	67	0	67	Marathas	2	..	2	..	..	..	2	..	2	..	..	..
Maps, English	6	0	6	Musulmans	2	1	3	..	..	..	2	1	3	..	..	..
Do. Gujerati	4	0	4	Parsees	6	1	7	..	1	1	3	1	4	3	1	4
Files of Newspapers	42	11	53	Christians	6	..	6	1	..	1	4	..	4	3	..	3
Total	842	176	1018	.....	38	13	51	16	13	29	29	18	47	25	8	33

(Signed) T. B. CURTIS,
Secretary.

NATIVE LIBRARY AT TANNA.

No. 465 of 1854.

Judicial Department.

To the Secretary to the Board of Education,

Bombay.

Sir,

I have the honour to forward the accompanying Annual Report on the working of the Native Library at Tanna during the past year, and to request that you will be good enough to lay the same before the Board.

I have the honour to be, Sir,

Your most obedient Servant,

(Signed) C. G. Kemball,

Acting Assistant Judge and Session Judge in Charge S. S.

Concan Court of Adawlut, Tanna, 13th April 1854.

To R. Keays, Esq.,

Judge of the Concan.

Sir,

In compliance with the Government circular letter No. 3477, dated 3rd September 1850, I have been directed by the Committee of the Tanna Native Library to submit an annual report on the working of this Institution, for transmission to the Board of Education.

There was a balance in favour of the Library on the 1st January 1853, of Rs. 307-5-6; since that time Rs. 801-7-0 have been received on account of donations and subscriptions, out of which Rs. 62-7-9 have been laid out on the purchase of English, Maráthá, and Gujaráti books.

The following detail will show the expenses incurred during the year under Report for keeping up the Library :—

Establishment charges	Rs.	156	0 0
Purchase of new books		62	7 9
Subscription to newspapers		80	0 0
Postages		159	0 6
Contingencies		60	11 4
House-rent		72	0 0
	Rs.	590	3 7

The number of subscribers to the library is 85, of whom 14 are Europeans, and 71 Natives; the average monthly subscription amounts to Rs. 61, which, as compared with the previous year, exhibits a trifling decrease of Rs. 4.

The subjoined is the table showing the numbers of volumes which are in the possession of the library, including purchases and presents :—

English volumes..	465
Vernacular books	100
Gujaráti ditto..	60
Hindustáni ditto..	14
Oordoo ditto	24
Canarese ditto	4
Maps and illustrations	13
Pamphlets	90
Total..	770

Regulations and Circular Orders, &c. viz :—

Harrison's Code of Regulations for the year 1827.

English Enactments of the Government of India, from the year 1834 to 1852.

Translations of English Enactments of the Government of India, from the year 1834 to 1850.

Circular Orders, both Dewanee and Foujdaree, from the year 1821 to 1850.

Translation of Interpretations, from the year 1828 to 1838.

I am happy to report that the library is in possession of all the newspapers, periodicals, and pamphlets, of which a very few are subscribed for, the rest being supplied gratis through the medium of some Europeans, Native members, and Editors.

I have the honour to be, Sir,
Your most obedient Servant,
(Signed) GANPUTRAO JAIRANG,
Secretary.

Tanna, Native Library, 18th February 1854.

APPENDIX No. XVII.

ANNUAL REPORT

OF THE

ELPHINSTONE INSTITUTION,

FOR THE YEAR 1853.

ANNUAL REPORT

OF THE

ELPHINSTONE INSTITUTION,

BOMBAY,

FOR THE

YEAR 1853.

Bombay:
PRINTED AT THE
BOMBAY EDUCATION SOCIETY'S PRESS.

1854.

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Establishment,

As on the 1st January 1854.

College.

Designations.	Names.	Salaries.
Principal, and Professor of Logic, Mental and Moral Philosophy	John Harkness, A.M..	Rs.700
Professor of History and General Literature (Europe) ..	R. T. Reid, LL.B.....	..
(Professor of Mathematics and Natural Philosophy,) Acting Professor of History, Literature, and Political Economy	R. S. Sinclair, M.A...	500
Professor of Chemistry, Botany, and Geology	Herbert Giraud, M.D.	200
Acting Professor of Mathematics and Natural Philosophy.	Dadabhai Naorozji ..	300

Central School.

Master.....William Draper, A.M.

Assistant Masters.

Bamanji Pestanji.
Jahanghir Barjodji.
Kaikhosru Hormazji.
Edalji Nushirvanji.
Pestanji Jahanghirji.
Hormazji Edalji.
Babji Amritrao.
Nushirvanji Naorozji.
Khurshedji Manekji.
Harichand Janardhan.
Mancherji Mervanji.
Govind Vishnu.
Dinkar Ramchandra.

Sanscrit Teacher.

Keshava Shastri bin Sakharam.

Persian Teacher.

Aga Mirza Pir Mahamad.

VERNACULAR TEACHERS.

Gujaráti.	*Maráthi.*
Ranchoddas Ghirdharlal.	Vienkatesh Babacharia.
Mansukha Narsidas.	Bal Parasharam Shastri.

BRANCH SCHOOLS.

Mumbadevi.

Designations.	Names.
Master	Kavazji Shapurji.
Assistant Masters	Gangadas Keshoddas.
	Maneksha Beramji.
	Framji Beramji.
	Nanabhai Bhaskar.
Vernacular Teachers	Motiram Maneklal.
	Bhikoba Bhaskar.

Fort.

Master	Jamshedji Rustamji.
Assistant Masters	Kavazji Nushirvanji.
	Edalji Nanabhai.
	Sorabji Edalji.
Vernacular Teacher	Chimanlal Nandalal.

ANNUAL EXAMINATION,

1853.

(Circular.)

The Annual Examination will commence at the Institution on Monday the 28th instant, at 11 A. M., and will be conducted in the following order, viz :—

I.—BRANCH SCHOOLS.

Language and General Knowledge.	No. of Classes.	No. of Pupils.	Days.	Arithmetic.	No. of Classes.	No. of Pupils.
Múmbadevi.....	4	126	*Monday, 28th.*	Fort.....	4	138
Fort	4	138	*Tuesday, 29th.*	Múmbadevi.....	4	126
Múmbadevi.....	3	93	*Wednesday, 30th.*	Múmbadevi.....	3	93
		357				357

II.—CENTRAL SCHOOL.

Language and General Knowledge.				Arithmetic.			
Class.	Division.	No. of Classes.	No. of Pupils.	Days.	Class.	Division.	No. of Classes.	No. of Pupils.
II III.	Mar..... 2nd, 3rd & 4th Guj.	4	159	*Thursday, 1st.*	VI	Second.....	1	34
III.	1st Guj. ... .. 1st & 2nd Mar.	3	122	*Friday, 2nd.*	V.	Mar..... 1st & 2nd Guj..	3	128
IV.	1st & 2nd Guj. Mar.....	3	120	*Saturday, 3rd.*	III.	1st & 2nd Mar.. 1st Guj.....	3	111
V.	Mar ..... 1st & 2nd Guj.	3	121	*Monday, 5th.*	II. III.	Mar ..... 2nd, 3rd & 4th Guj.	4	164
VI.	Second ..... First*	. ..	42 32	*Tuesday, 6th.*	IV.	1st & 2nd Guj.. Mar.....	3	127
			596					564

* See below, Candidates for Clare Scholarships.

III.—COLLEGE.

CANDIDATES FOR CLARE SCHOLARSHIPS.

Subjects. From 11 to 2, Vivâ voce. From 2 to 5, Paper.	Days.	
	Monday,	5*th.*
	Tuesday,	6*th.*
Translation.	*Wednesday,*	7*th.*
History, Geography.	*Thursday,*	8*th.*
Mathematics.	*Friday,*	9*th.*
English Language.	*Saturday,*	10*th.*

SECOND YEAR'S STUDENTS.

Subjects. From 11 to 2, Paper. From 2 to 5, Vivâ voce.
Translation.
Political Economy.
Chemistry, Geology.
Mathematics.
Mental Philosophy.
History, Literature.

FIRST YEAR'S STUDENTS.

Subjects. From 11 to 2, Vivâ voce. From 2 to 5, Paper.	Days	
Translation.	*Monday,*	12*th.*
Logic.	*Tuesday,*	13*th.*
Chemistry.	*Wednesday,*	14*th.*
History, Literature.	*Thursday,*	15*th.*
Political Economy.	*Friday,*	16*th.*
Mathematics.	*Saturday,*	17*th.*

THIRD YEAR'S STUDENTS.

Subjects. From 11 to 2, Paper. From 2 to 5, Viva voce.
Essay.
Political Economy.
Chemistry, Geology.
Mathematics.
Moral Philosophy.
Literature, Ethics.

PROGRAMME OF COURSE OF STUDY.

1853.

I.—BRANCH SCHOOLS, & LOWER CENTRAL SCHOOL.

First *(Lowest)* Class.

English Reading.—M'Culloch's First and Second Books.
Writing.—Progressive Lessons.
Vernacular.—Moral Class-Book ; Grammar ; Outlines of Geography.
Arithmetic.—Simple Rules.

Second Class.

English Reading.—M'Culloch's Third Book.
Grammar.—Reid's Rudiments of.
Writing.—Figures, Capitals, and Text.
Vernacular.—Geography and History of Maharashtra ; Grammar.
Arithmetic.—Fractions, Vulgar and Decimal.
Vernacular and English.—Exercises on the Tenses ; School Dialogues.

Third Class.

English Reading.—Chambers' Moral Class-Book.
Grammar.—Reid's Rudiments of.
Geography.—Reid's.
Arithmetic.—Thomson's, Proportion.
Writing.—Round Hand.
Vernacular.—Introduction to the History of India ; Grammar.
Vernacular and English.—Idiomatic Exercises ; Green's Phrases.

Fourth Class.

English Reading.—M'Culloch's Series of Lessons.
Grammar.—M'Culloch's.
Geography.—Reid's.
Arithmetic.—Thomson's, Interest, Practice, Involution, Evolution.
Writing.—Small Hand.

Vernacular.—History of British India; Grammar.
Vernacular and English.—Idiomatic Exercises; Green's Phrases.

II.—UPPER CENTRAL SCHOOL.

Fifth Class.

English Reading.—M'Culloch's Course of Reading: Poetical Pieces.
Grammar.—M'Culloch's.
Geography.—Nicholl's.
History.—Chambers' History of the British Empire; Wilson's Universal History.
Geometry.—Euclid, Books I. and II.
Algebra.—Simple Equations.
Writing.—Written Exercises.
Vernacular.—Life of Columbus; Grammar; History of British India.
Sanscrit.—Shabd Rupavali; Samas Chakra.

Sixth Class, 2nd Division.

English Reading.—M'Culloch's Course of Reading.
Grammar.—M'Culloch's.
Geography.—Nicholl's.
History.—Chambers' History of the British Empire; Wilson's Universal History; Taylor's Manual of Ancient History.
Geometry.—Euclid, Books I.—IV.
Algebra.—Quadratic Equations.
Physics.—Chambers' Matter and Motion.
Writing.—Exercises and Translations.
Sanscrit.—Shabd Rupavali; Samas Chakra; Bodhavachan; Laghu Hitopadesh.
Persian.—Amadan Karima; Simple Sentences.

Sixth Class, 1st Division.

(Candidates for Clare Scholarships.)

English Language. — M'Culloch's Course of Reading, and Grammar.

Geography.—General, of the Four Quarters; particular, of Hindustan.

History.—Marshman's History of India; Taylor's Manuals (omitting the portions specified in the Scholarship Rules).

Mathematics.—Euclid, Books I.—VI., with Exercises; Young's Quadratic Equations; the application of Logarithms to Interest and Annuities; Plane Trigonometry, Young's, omitting Articles 27, 28, 31.

Physics.—Chambers' Matter and Motion, pp. 44.

Translation.—Written and Oral, into and from the Vernaculars.

Sanscrit.— } The same as in the 2nd Division.
Persian.— }

III.—COLLEGE.

First Year's Students.

English Literature.—Poetry.—Chambers' Cyclopædia: Goldsmith, Cowper; Bacon on Poesy.

Prose.—Chambers' Cyclopædia: Selections from the Novelists.

Philology.—Extracts from Dr. Latham's English Language, and from Winning's Comparative Philology.

History.—Heeren's Political System of Europe and its Colonies, A. D. 1492—1555.

Murray's British India, Chaps. iii.—v.

Guizot's Introductory Discourse on the History of the English Revolution.

Political Economy.—Mill's, Book I. Chaps. i.—viii., Book III. Chaps. i.—vi.

Logic.—Easy Lessons on Reasoning (Whately's).

Locke's Conduct of the Understanding.

Mathematics.—Thomson's Spherical Trigonometry; Theory of Logarithms; Young's Theory of Equations, Chaps. i.—vii. and Chap. x.; Mathematical Instruments.

Physics.—Chambers' Matter and Motion: The Laws of Motion. Chambers' Mechanics: The Mechanical Powers.

Chemistry.—Chemical Affinity, Laws of Chemical Combination, Light, Heat, Magnetism, Frictional Electricity.

The Chemistry of the Non-Metallic, and of the most important of the Metallic Elements.

SECOND YEAR'S STUDENTS.

English Literature.—Poetry.—L'Allegro and Il Penseroso; Pope's Essay on Criticism.

Prose.—Chambers' Cyclopædia: Selections from Bacon, Burleigh, Locke, Boyle, Ray, Steele, Addison, Defoe, Swift, Pope.

Philology.—Extracts from Dr. Latham's English Language, 3rd edition, 8vo.

History.—Heeren's Political System of Europe and its Colonies, A. D. 1660—1740.

Smyth's Lectures: Louis XIV., Charles II., James II. Revolution, William III.

Macaulay's Essays: Sir William Temple, War of the Succession in Spain.

Political Economy.—Mill's, Book I. Chaps. i.—viii., Book II. Chap. xvi., Book III. Chaps. i.—vi.

Hancock's Introductory Lecture (Trin. Term, 1848); Green's Lectures I. and II. (1853).

Mental Philosophy.—Locke's Essay, Introduction, with Books II. and III. (omitting in Book II. Chap. i. Sects. 10—20; Chap. xiii. Sects. 10 to the end; Chap. xv.; Chap. xxi. Sects. 11—71; Chaps. xxxi. and xxxii.; and in Book III. Chap. vi.) Book IV. Chaps. i.—xvii.

Cousin's History of Modern Philosophy, Lectures XV.—XXIII.

Mathematics.—Waud's Algebraical Geometry, Chaps. i.—xi. and the Cycloid; Exercises on the Right Line from Salmon.

Physics.—Chambers' Hydrostatics and Pneumatics; Statical Electricity.

Geology.—The characters of the more important and common Simple Minerals.

The Physical characters, Mineral composition, and Origin of the Four Classes of Rocks—Aqueous, Volcanic, Plutonic, and Metamorphic; the Mineral Characters, the Fossil Organic Remains, and the Origin of the successive groups of Sedimentary Rocks.

THIRD YEAR'S STUDENTS.

English Literature.—Poetry.—Hamlet; Bacon on Poesy.

Prose.—Selections from Bacon's Essays.

Philology.—Dr. Latham's English Language, Part I. Chaps. i., vii., viii., Part IV. Chaps. i.—ix.

Political Economy.—Mill's, Book V. Chaps. i.—vii.; Heron's Three Lectures on Taxation; Smith's Wealth of Nations, by M'Culloch, Note XXX.; Hancock on the effects of the Usury Laws on the Funding System; Hancock's Perfect Income Tax; Gladstone's Budget.

Mental and Moral Philosophy.—Stewart's Outlines.

Butler's Analogy, Part I., Three Sermons on Human Nature, Dissertation on Virtue.

Mathematics.—Young's Integral Calculus: Chaps. i.—iii., Integration between Limits, Principles of Rectification, Quadrature and Cubature.

Physics.—Young's Mechanics: Statics; Dynamics, Chaps. i., ii.

Geology.—The same as Second Year's Students.

JOHN HARKNESS, A.M.,
Principal.

Elphinstone Institution,
Bombay, 26th November 1853.

I.—BRANCH SCHOOLS.

1st.—MUMBADEVI.

LANGUAGE AND GENERAL KNOWLEDGE.

Examiner, Prof. HARKNESS.

FIRST CLASS.

2nd Gujaráti Division.

TEACHERS, *English,* Jahanghir Rustamji.
Gujaráti, Motiram Maneklal.

Number of Pupils 20
Number present at Examination..... 17

Studies.

English.—M'Culloch's First Book, the whole.
Gujaráti.—Moral Class-Book, pp. 63 ; Outlines of Geography, pp. 13.

2. These boys were admitted about two months ago. They read any sentence in the book with tolerable accuracy ; distinguish nouns and adjectives, and give the meaning of single words ; know the definitions in geography, point out capes, bays, gulfs, &c.

3. Gujaráti reading distinct and good ; parsing fair.

4. *1st Gujaráti Division.*

TEACHERS, *English,* Framji Beramji.
Gujaráti, Motiram Maneklal.

Number of Pupils 35
Number present at Examination.... 32

Studies.

English.—M'Culloch's First and Second Books.
Gujaráti.—Moral Class-Book, pp. 82 ; Geography of Asia.

5. These have been about five months in the English School. Reading not very fluent, but distinct, down to five or six from the bottom ; know cases, tenses, &c. ; point out the mountains, rivers, and principal towns.

6. Gujaráti reading and parsing pretty good.

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7. *2nd Maráthi Division.*

TEACHERS, *English,* Gangadas Keshoddas.
Nanabhai Bhaskarji.
Maráthi, Bhikaji Bhaskar.

Number of Pupils 26
Number present at Examination.... 24

Studies.

English.—M'Culloch's First Book, the whole.

Maráthi.—Moral Class-Book, pp. 40 ; Outlines of Geography.

8. Rather more than half of the class have made good progress in reading, for the time (about two months) ; in geography they are just beginning.

9. With the exception of one or two, they read Maráthi distinctly ; parsing indifferent.

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10. *1st Maráthi Division.*

TEACHERS, *English,* Gangadas Keshoddas.
Maráthi, Bhikaji Bhaskar.

Number of Pupils 28
Number present at Examination.... 27

Studies.

English.—M'Culloch's First and Second Books, the whole.

Gujaráti.—Moral Class-Book, pp. 100 ; Outlines of Geography : India and Europe.

11. This class also began in July last, but their progress in English has not been equal to that of the Gujaráti class of the same standing ; in geography, answering respectable.

12. Maráthi reading tolerably good ; parsing altogether an affair of memory.

13. SECOND CLASS.

Gujaráti Division.

TEACHERS, { *English*, Maneksha Beramji. / *Gujaráti*, Motiram Maneklal.

Number of Pupils 41
Number present at Examination.... 40

Studies.

English.—M'Culloch's Third Book, pp. 50 ; Reid's Grammar, pp. 13.

Gujaráti.—Moral Class-Book, pp. 126 ; Outlines of Geography.

English and Gujaráti.—Exercises on the Tenses.

14. Reading particularly good for the time; one or two little poetical pieces really with great propriety. About half the class took down a few sentences from dictation in a strong but very legible hand, and with correct spelling. In geography answering creditable.

15. Gujaráti reading fluent, without being too quick, and with correct emphasis ; parsing pretty good.

---

16. *Maráthi Division.*

TEACHERS, { *English*, Nanabhai Bhaskar. / *Maráthi*, Bhikaji Bhaskar.

Number of Pupils 39
Number present at Examination..... 36

Studies.

English.—M'Culloch's Third Book, pp. 35 ; Reid's Grammar, pp. 12.

Maráthi.—Moral Class-Book, pp. 120 ; Outlines of Geography : India and Europe.

English and Maráthi.—School Dialogues, pp. 20.

17. The appearance of this class is the least satisfactory of any that I have yet examined. It was till lately in charge of Namdeva, and seems to have suffered from a change of teachers, as well as to have been unfortunate in those it has had. The

boys are, upon the whole, intelligent looking, but their progress has not been in proportion to the time they have been at school, about ten months.

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18. THIRD CLASS.

Gujaráti Division.

TEACHERS, { *English*, Kavazji Shapurji. / *Gujaráti*, Motiram Maneklal.

Number of Pupils 30
Number present at Examination.... 30

Studies.

English.—Moral Class-Book, pp. 53 ; Reid's Grammar, pp. 25.
Gujaráti.—Memoir of Columbus, pp. 82 ; Outlines of Geography : Asia.
English and Gujaráti.—Green's Phrases, pp. 30.

19. The progress of this class has also been somewhat slow. One boy in it was admitted when the school was first opened, about three years ago! Some boys of the same standing are already in the Upper Central School, and the majority of the class began English only eighteen months ago. These read and parse creditably for the time.

20. In Gujaráti reading and grammar there seems to be little difference between one class and another.

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21. 2ND.—FORT.

FIRST CLASS.

TEACHERS, { *English*, Edalji Nanabhai. / *Gujaráti*, Chiminlal Nandalal.

Number of Pupils 38
Number present at Examination.... 35

Studies.

English.—M'Culloch's First and Second Books, the whole.
Gujaráti.—Moral Class-Book, pp. 90 ; Outlines of Geography : Asia.

22. Pronunciation not faultless, but the reading upon the whole creditable for the time—five months; parts of speech distinguished. In geography but little progress has been made.

23. Gujaráti reading indistinct, and far too quick; parsing indifferent.

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24. SECOND CLASS.

2nd Division.

TEACHERS, { *English*, Sorabji Edalji. / *Gujaráti*, Chiminlal Nandalal.

Number of Pupils 34
Number present at Examination.... 33

Studies.

English.—M'Culloch's First and Second Books, the whole; Third Book, pp. 84; Reid's Rudiments of English Grammar, pp. 12.

Gujaráti.—Moral Class-Book, the whole; Outlines of Geography: Asia.

25. The boys in the upper half of the class read pretty well, and apply the rules of grammar, so far as they have learnt them, readily and accurately. With the geography of Asia, as given in their little text book, they are quite familiar.

26. Gujaráti reading a good deal better than that of the last class.

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27. *1st Division.*

TEACHERS, { *English*, Jamshedji Rustamji. / *Gujaráti*, Chiminlal Nandalal.

Number of Pupils 38
Number present at Examination..... 34

Studies.

English.—M'Culloch's First and Second Books, the whole; Third Book, pp. 110; Reid's Rudiments of English Grammar, pp. 13.

Gujaráti.—Moral Class-Book, the whole; Outlines of Geography: Europe and Asia.

28. Reading very fair, down to near the bottom of the class; parsing good. Some general questions concerning the size and figure of the earth answered correctly; the mountains, rivers, and principal towns of Hindustan described, and pointed out on the map.

29. Gujaráti reading rather monotonous; parsing tolerably good.

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30. THIRD CLASS.

TEACHERS, { *English*, Kavazji Nushirvanji. / *Gujaráti*, Chiminlal Nandalal.

Number of Pupils 28
Number present at Examination.... 27

Studies.

English.—M'Culloch's Third Book, the whole; Chambers' Moral Class-Book, pp. 67; Reid's Rudiments of English Grammar, pp. 33; Reid's Rudiments of Modern Geography, pp. 20.

Gujaráti.—Memoir of Columbus, the whole.

Gujaráti and English.—Green's Phrases, pp. 12.

31. Reading pretty fluent; pronunciation not free from faults; parsing good. In geography they seem to know all that is contained in their book. More history should be given in connection with it. A class-book of this sort is still a desideratum.

32. Gujaráti reading of much the same character as that of the lower class; parsing apparently by rote, and far too rapid.

GENERAL REMARKS.

33. The number of boys attending the Fort Branch is exactly the same as at the previous examination. The number at Múmbadevi has increased from 125 to 219.

34. The building in the Fort is roomy and well ventilated;

that at Múmbadevi is deficient in both these respects. It appears that the Masters and Assistant Masters have been regular and attentive to duty. Vernacular teachers have been appointed to instruct the boys in their own language. The classes have been placed, as far as possible, on the same footing as those in the Central School. Still the progress of the boys is more slow than in the latter.

35. The Masters, though relieved at stated periods by the Vernacular Teachers, have still to do extra duty more frequently than assistants here. Besides, they have not the same opportunity of consulting books of reference, or attending lectures on any subject of study they may be engaged in. It is therefore not to be wondered at that there is a disinclination to go there, and that many of those now employed in them are anxious to return to the Institution.

36. The best plan would seem to be that each assistant, when first appointed, should take his turn of duty in one of the Branch Schools. But frequent changes of Masters would be injurious, even if every new Teacher were to enter upon his office with alacrity,—which would hardly be the case if it were made compulsory. The only way of obviating this is to make the salaries of the Teachers somewhat higher than in the Central School.

37. Every endeavour has been used to procure more commodious premises than the house now rented at Múmbadevi, but without success. The two purposes are so diametrically opposed, that it seems scarcely possible, that any building designed for a Hindu dwelling-house should be adapted for a school.

38. If it be resolved to continue these subsidiary schools in operation, a proper site should be selected, and a suitable building erected. It may, however, be worth consideration whether the teaching of the mere elements might not now be left to private enterprise in Bombay. There is little doubt that means would be found to acquire the amount of knowledge requisite to pass the entrance examination, the standard of which might even be considerably raised. The rudimentary schools would thus be gradually raised into a higher order of schools, to be eventually absorbed in the College.

II.—CENTRAL SCHOOL.

(1) LOWER SCHOOL.

LANGUAGE AND GENERAL KNOWLEDGE.

Examiner, Prof. HARKNESS.

39. SECOND CLASS.

Maráthi Division.

TEACHERS, *English*, Govind Vishnu.
Maráthi, Vienkatesh Babachárya.

Number of Pupils in the Class 35
Number present at Examination ... 35

Studies.

English.—M'Culloch's Third Book, pp. 112; Reid's Rudiments of English Grammar, pp. 18.

Maráthi.—Moral Class-Book, pp. 60.

Maráthi and English.—School Dialogues, the whole.

40. These boys began English about eleven months ago. With the exception of two or three, they read short sentences pretty fluently. Their answers show intelligence and thought. Some specimens of writing very fair for the time.

41. Maráthi reading distinct, but too loud, and in quite a different tone of voice from their English reading, or their ordinary speaking; parsing pretty good.

42. THIRD CLASS.

4th Gujaráti Division.

TEACHERS, *English*, Bamanji Pestanji.
Gujaráti, Mansukhram Narsidas.
Ranchoddas Ghirdharlal.

Number of Pupils in the Class 45
Number present at Examination.... 43

Studies.

English.—Moral Class-Book, pp. 120; Reid's Rudiments of English Grammar, pp. 33; Reid's Geography: Europe and Asia.

Gujaráti.—Memoir of Columbus, pp. 100.

Gujaráti and English.—Green's Phrases, pp. 40.

43. Read well, down to the bottom of the class; parse correctly, and understand the formation of nouns, adjectives, &c.; phrases readily and correctly given; answering in geography highly creditable. Appearance altogether satisfactory.

44. Gujaráti reading and parsing upon the whole good.

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45. *3rd Gujaráti Division.*

TEACHERS, { *English*, Nasarvanji Naorozji. / *Gujaráti*, Parbhuram Navalram.

Number of Pupils in the Class 40
Number present at Examination..... 38

Studies.

English.—Moral Class-Book, pp. 120; Reid's Rudiments of English Grammar, pp. 42; Reid's Geography: Asia, Europe, and Hindustan.

Gujaráti.—Memoir of Columbus, pp. 50.

Gujaráti and English.—Green's Phrases, pp. 50.

46. Pronunciation distinct and correct; parsing good. In connection with the geography of Hindustan a good deal of information has been given regarding its history, productions, &c.

47. Gujaráti reading and parsing much the same as in the last class.

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48. *2nd Gujaráti Division.*

TEACHERS, { *English*, Mancherji Mervanji. / *Gujaráti*, Ranchoddas Ghirdharlal.

Number of Pupils in the Class 39
Number present at Examination.... 36

Studies.

English.—Moral Class-Book, pp. 112; Reid's Rudiments of English Grammar, pp. 34; Reid's Geography: Asia, Europe, North America, and Hindustan.

Gujaráti.—Introduction to the History of India, pp. 85.

Gujaráti and English.—Green's Phrases, pp. 40.

49. There is very little difference between this and the preceding class. They have been kept distinct merely because they would make one inconveniently large class. In geography and history the other, which is the lower division, made the best appearance. By neither were any good specimens of writing shown. More attention requires to be paid to the penmanship.

50. Gujaráti reading and parsing respectable; the history well prepared.

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51. *1st Gujaráti Division.*

TEACHERS, { *English*, Khurshedji Manekji. / *Gujaráti*, Motilal Jivandas.

Number of Pupils in the Class 45
Number present at Examination..... 45

Studies.

English.—M'Culloch's Series of Lessons, pp. 100; Reid's Rudiments of English Grammar, pp. 33; Reid's Geography: Outlines of the Four Quarters, particular Geography of India.

Gujaráti.—Introduction to the History of India, pp. 129.

Gujaráti and English.—Green's Phrases, pp. 50.

52. Reading not free from faults; explanation and parsing satisfactory; knowledge of geography minute and accurate. Still no good specimens of writing.

53. In reading Gujaráti more attention is paid to the sense than in some of the other classes, and the construction is better understood.

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54. *2nd Maráthi Division.*

TEACHERS, { *English*, Harichand Janardhan. / *Maráthi*, Vienkatesh Babachárya.

Number of Pupils in the Class 34
Number present at Examination.... 28

Studies.

English.—Moral Class-Book, pp. 67; Reid's Rudiments of English Grammar, pp. 30; Reid's Geography, pp. 22.

Maráthi.—Introduction to the History of India, pp. 50.

Maráthi and English.—Idiomatic Exercises, pp. 50.

55. Pronunciation rather slovenly, words being frequently curtailed of their fair proportions; parsing somewhat slow, but on the whole correct; answering in geography very good.

56. Maráthi reading a little monotonous; parsing apparently by rote.

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57. *1st Maráthi Division.*

TEACHERS, *English*, Dinkar Ramchandra.
Maráthi, Bal Parasharam, Shástri.

Number of Pupils in the Class 42
Number present at Examination..... 37

Studies.

English.—Moral Class-Book, pp. 80; Reid's Rudiments of English Grammar, pp. 34; Reid's Geography: Hindustan.

Maráthi.—Introduction to the History of India, pp. 77.

Maráthi and English.—Idiomatic Exercises, pp. 60.

58. There are in this class some intelligent looking boys. Reading deficient in accent; parsing fair. The Idiomatic Exercises have been committed to memory, but the precise meaning of each word has not been sufficiently attended to. Knowledge of geography accurate, so far as it goes.

59. In Maráthi reading there is considerable improvement. Parsing has been made an exercise of judgment, and the facts as well as the words have been attended to.

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60. FOURTH CLASS.

2nd Gujaráti Division.

TEACHERS, *English*, Edalji Nushirvanji (*on sick leave*).
Gujaráti, Mansukharam Narsidas.

Number of Pupils in the Class 42
Number present at Examination ... 38

Studies.

English.—M'Culloch's Series of Lessons, pp. 150; M'Culloch's Grammar, pp. 30; Reid's Geography, pp. 30.

Gujaráti.—History of British India, pp. 102.

Gujaráti and English.—Green's Phrases, pp. 100.

61. During the Teacher's absence on sick leave, this class has been taught by Kahandas Tapidas, 3rd Year's Student; Dadabhai Muncherji, 2nd Year's Student; and Mancherji Dorabji, 1st Year's Student. To the first was assigned reading and explanation of the lessons; to the second rules of grammar, and parsing of a portion of each day's lesson; and to the third geography. The result of the examination was more satisfactory than could have been looked for in the circumstances, and does credit to the young men to whom the duty was intrusted.

62. Gujaráti reading tolerably good; parsing indifferent; the history has not been so well prepared as in the preceding class.

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63. *1st Gujaráti Division.*

TEACHERS, { *English,* Kaikhasru Hormazji. / *Gujaráti,* Somnarayan Nandnarayan.

Number of Pupils in the Class 43

Number present at Examination.... 37

Studies.

English.—M'Culloch's Series of Lessons, pp. 135—202; M'Culloch's Grammar, pp. 68; Reid's Geography: Asia and Europe, particular Geography of Hindustan.

Gujaráti.—History of British India, pp. 142.

Gujaráti and English.—Green's Phrases, pp. 75—150.

64. Neither in fluency of reading nor in pronunciation did this class exhibit any marked superiority. The explanations and parsing showed much intelligence and thought. In geography the answering was particularly good; a great deal of useful information had been communicated regarding the history and statistics of the principal places. It is desirable that this method were generally adopted, as it not only gives interest to the subject, but the recollection of both places and events is facilitated by the associating link.

65. The Vernacular history has been thoroughly studied, with reference to the events as well as the language.

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66. *Maráthi Division.*

TEACHERS, { *English*, Babji Amritrao.
Maráthi, Bal Parasharam, Shástri.

Number of Pupils in the Class 35
Number present at Examination.... 29

Studies.

English.—M'Culloch's Series of Lessons, pp. 120; M'Culloch's Grammar, pp. 145; Reid's Geography, pp. 25.

Maráthi.—History of British India, pp. 65.

Maráthi and English.—Idiomatic Exercises, pp. 175.

67. In spite of some errors in pronunciation, and an occasional mistaking of one word for another, the appearance of this class was, upon the whole, creditable to the Master. In geography inferior to the preceding class, both in extent and accuracy of information. Explanation and parsing respectable. No good specimen of penmanship.

68. The History of British India has been carefully studied in the Vernacular, at the same time that pronunciation and parsing have received their due share of attention.

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(2) UPPER SCHOOL.

Examiners.

LANGUAGE AND GENERAL KNOWLEDGE, Prof. HARKNESS.
HISTORY AND GEOGRAPHY, Prof. SINCLAIR.

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69. FIFTH CLASS.

2nd Gujaráti Division.

TEACHERS, { *English*, Hormazji Edalji, and Darasha Dorabji.
Gujaráti, Mansukharam Narsidas.

Number of Pupils in the Class 42
Number present at Examination..... 34

Studies.

English.—M'Culloch's Course of Reading: the Poetry as far as p. 191; M'Culloch's Grammar, the whole; Wilson's Universal History, pp. 42; History of British Empire (Chambers') pp. 57; Reid's Geography: India, and the use of the Terrestrial Globe.

Gujaráti.—Memoir of Columbus, the whole.

70. English reading, grammar, and universal history have been taught by Hormazji; the History of the British Empire, Geography of India, and use of the globes, by Darasha. They read both prose and poetry with fluency, but, in explaining the latter, they occasionally failed. In general history their answers showed both intelligence and industry.

71. In other subjects they were examined by Professor Sinclair, who reports as follows:—"This class I examined in parts of Chambers' British Empire, Reid's Geography, the Geography of India, and in the use of the globes. The general appearance of the class was very good, and evinced marks of careful instruction."

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72. *1st Gujaráti Division.*

TEACHERS, *English*, Jahanghir Barjodji.
Sorabji Rustamji.
Gujaráti, Ranchoddas Ghirdharlal.

Number of Pupils in the Class 40
Number present at Examination.... 37

Studies.

English.—M'Culloch's Course of Reading: the Poetry as far as p. 147; M'Culloch's Grammar: Syntax; Reid's Geography: India, and the use of the Terrestrial Globe; Wilson's Universal History: Rome, History of the British Empire, pp. 93.

Gujaráti.—Memoir of Columbus, the whole; History of British India, pp. 62.

73. The pronunciation and accent of the greater part of the class pretty good. A few are too old to improve in this respect. Their knowledge of the derivation of words, and of the force of prefixes and affixes, highly respectable.

74. Both the Vernacular histories appear to have been read with attention.

75. Professor Sinclair reports:—"This class' answering in Roman History and Chambers' British Empire was very respectable. They passed, also, a creditable examination in the Geography of India and the use of the globes."

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76. *2nd Maráthi Division.*

TEACHERS, *English*, Govind Gangadhar.
History and Geography, Bhairaonath Mangesh.
Maráthi, Keshava Shástri.

Number of Pupils in the Class 38
Number present at Examination.... 32

Studies.

English.—M'Culloch's Course of Reading, pp. 167; M'Culloch's Grammar, the whole; Wilson's Universal History, pp. 67; Nicholl's Geography: Asia, India, and the use of the Terrestrial Globe.

Maráthi.—Life of Columbus, the whole; History of British India, pp. 60.

Maráthi and English.—Translations, oral and written.

77. This class displayed much intelligence, but appeared deficient in animation. The want of this quality detracted from the value of their answers, which were generally sound. Their articulation was also affected by it; explanation and parsing, upon the whole, accurate.

78. The Vernacular class showed a good knowledge of the etymology of words, and of the meaning of Sanscrit roots entering into Maráthi composition. They had also thoroughly mastered the history read.

79. Professor Sinclair reports:—"The answering of this class in history at the examination was very good. Having examined them myself in some parts of the first 67 pages of Wilson's Universal History, I asked their Teacher to propose some questions, that I might see the manner in which they had been instructed; and I am enabled to report favourably both of him

and the class. In geography their answering in the general features of Asia, and more particularly in the geography of India, and in the use of the globes, was creditable."

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80. SIXTH CLASS.

2nd Division.

TEACHERS, { *English*, Pestanji Jahanghir. / *Vernacular* (see para. 85).

Number of Pupils in the Class 37
Number present at Examination ... 29

Studies.

English.—M'Culloch's Course of Reading, pp. 204; Nicholl's Geography: British India; History of the British Empire, pp. 158; Wilson's Universal History, pp. 43—103; Taylor's Manual of Ancient History, pp. 239 (omitting certain portions, as specified in the Scholarship Rules).

81. This class was taught till within the last two months by Ardesar Framji, who had been an Assistant Master in the Institution upwards of six years, and had proved himself a zealous and efficient teacher. The appearance of the class is creditable alike to him and to the present Teacher, Pestanji Jahanghir. Reading of the majority good; explanations full and satisfactory; much useful information in history, geography, and physics had been communicated, illustrative of the lessons in the "Course of Reading."

82. Professor Sinclair reports:—"The greater part of this class passed a comprehensive examination in history and geography with great credit. As the examination was conducted altogether by *vivâ voce* answering, I am not in a position to speak of their attainments in composition, spelling, or punctuation."

83. In the Sixth Class there are two divisions. These are not, however, composed exclusively either of Maráthi or of Gujaráti-speaking boys, as is the case in the lower classes, but of both promiscuously according to proficiency,—the 1st Division (Candidate Class) being the most advanced. The reason of this arrangement is that the pupils, previous to their admission into

this class, must have acquired so much knowledge of English as to admit of that language being used as the principal medium of communication.

84. At this stage also the Vernacular teaching assumes a different character. For this purpose the Maráthi-speaking pupils in both Divisions form one class. This has been occupied, two hours a week, in studying the elements of Sanscrit, and two, in translating into and from Maráthi orally, with weekly written exercises.

85. In these subjects the Teacher during the past year has been Keshava Shástri, formerly a student in the Sanscrit College, Poona, and appointed Vernacular Master in the Institution about eighteen months ago. They have read Shabd Rupávali, Samas Chandrika, Bodh Vachan, and Hitopadesh.

86. The Reverend Dr. Stevenson, who was kind enough to conduct the examination on this occasion, as he had frequently done previously, was of opinion that the progress made in Sanscrit was respectable for the time.

87. In Maráthi translation some improvement has taken place. In translating into English, the foreign idiom is still frequently met with. The number of Gujaráti-speaking pupils being too large for one class, there were, till August last, two translation classes. These gave the meaning of the passages, upon the whole, very fairly. The orthography of the Gujarátis is at present in a somewhat unsettled state.

88. Since the appointment of a Persian Munshi in August, two classes have been formed for the study of Persian, corresponding with the class in Sanscrit, composed of the Maráthi-speaking pupils. These classes have been taught by Aga Mirza Pir Mahamad. They have read Amadan, and a part of Karima. They have also learnt some short sentences dictated by the Master.

89. The examination was conducted by Acting Professor Dadabhai Naorozji and Dosabhai Sorabji Munshi, who were of opinion that the progress of the Senior Division was creditable, and that of the Junior Division fair.

1st Division (Candidate Class).

Teacher, Mr. Draper.

90. At the examination for Clare Scholarships, the candidates who presented themselves consisted of—

Pupils in Class VI. 1st Division (Candidate Class)....	32
„ „ 2nd Division.....	5
Vernacular Teachers in the Institution.....	3
Former pupils.....	2
Pupil from the Government English School at Ahmedabad.....	1
Total .	43

Studies (see Programme).

91. The *vivâ voce* examination in English was conducted as follows: A short passage in prose and another in verse were selected. A candidate was called in and required to read these. Ten questions were then put to him, having reference to the meaning and etymology of the words, the construction of the sentences, and the facts whether of history or science alluded to, the value of each answer being denoted by a number. And, in this way, all the candidates were called in and examined in succession.

92. Two written translations were made by each candidate, the one from, and the other into, his Vernacular. These translations have been carefully examined, and the errors both in spelling and meaning marked.

93. The general character of the answering will be seen in Appendix C. I may here mention that the general result is very creditable to Mr. Draper. I believe at no time has the class made a better appearance.

94. Professor Sinclair, who examined in history and geography, reports as follows :—" The performance of the Candidate Class in the department of history and geography was creditable in the highest degree ; and reflects the greatest credit on the assiduity and painstaking of their instructor. Though it was impossible, in one day's examination, to spread the questions over such an extensive course as is embraced in Dr. Taylor's Manuals of Ancient and Modern History, Marshman's History of India, and the subject of geography, still I constructed the paper

questions in such a manner as to touch upon the most important of the political features of Ancient Greece, of Rome, of the Middle Ages, the British Constitution, and of European history, together with a little chronology and geography. The *vivâ voce* questions extended over Egypt, Greece, Asia Minor, and the dynasties of the East, and some of them bore on the causes which promoted and impeded the industrial and economic development, as well as on the ethnological relations, of the different nations. As far as lay in my power, I conducted the examination in such a way, and proposed the questions in such forms, as to eliminate all mere parrot-answering. Of the Candidate Class proper, (Class VI. 1st Division,) which had been under regular training for a year, 21 pupils have obtained over 60 per cent., 5 over 40 per cent., and 6 under 40 per cent.; of the other 14 competitors who presented themselves from various quarters, 2 out of 5 from the 2nd Division of Class VI. obtained over 40 per cent., and the remaining 12 under 40 per cent., in the department of history and geography."

95. The result of the examination in mathematics will be found in the following Report by Acting Professor Dadabhai Naorozji, and the selected answers in Appendix E (*h*).

JOHN HARKNESS, A.M.,
Principal.

ARITHMETIC AND MATHEMATICS.

Examiner, Acting Professor DADABHAI NAOROZJI.

96. To avoid repetition, and to afford a general view of the comparative proficiency of the different classes, the report has been thrown into the form of a table. Some of the columns require a little more explanation than their headings afford.

97. To each class two or more examples were proposed, and the pupils that worked more than one correctly, and explained the process, have been set down "Passed well"; of the rest, those who worked one example correctly, but failed to explain the process, are set down "Passed fairly." The number of those who did neither may be found by subtracting the sum of the other numbers from the number given in the adjacent column.

98. In the table for the Upper Central School, only the number of pupils that answered one or more questions in geometry correctly is given. Further sub-division could not be made for want of time.

99. To secure uniformity of exertion by the Teachers, and to be enabled to mark the progress of the pupils throughout the year, the classes in the Branch Schools were examined by turns every Monday, Wednesday, and Friday, from 10 to 11 A. M., and those of the Central School from 11 to 12¼, every Tuesday, Thursday, and Saturday. The column headed "Remarks" contains the dates of these periodical examinations of each class, and remarks regarding its progress, deduced from a comparison of the results, with the notes taken at the previous examination. In characterising this progress, the quality as well as the quantity of instruction has been taken into consideration.

100. On account of the periodical transferences, pupils are sometimes under more than one Master in the course of a year. The responsibility of each Master may be considered as proportionate to the length of time the pupils have been under him. I have therefore introduced a column, showing the length of time the class examined had been taught by its present Master, and under the head of "Remarks" the dates and results of the examination, of the classes taught by these Masters before the last transferences, are given.

101. The results of the examination of the Candidate Class, taught by Mr. Draper, and of 11 extra candidates, is given in Appendix C. 13 out of 32 of the Candidate Class have obtained above 60 per cent. marks, and 11 above forty per cent., leaving only a fourth of the class below 40. The studies of the class during the year are given in the programme.

102. In physical science, this class was taught by Ardeshir Framji till the end of September, and afterwards by Bomanji Pestanji. They have passed a satisfactory examination.

103. The following are the tables referred to, viz :—

(*a*) Report on the Classes in the Mumbadevi Branch School.
(*b*) „ „ „ Fort Branch School.
(*c*) „ „ „ Central Lower School.
(*d*) „ „ „ Central Upper School.

(*a*) Mumbadevi Branch School.

Arithmetic.

Class.	Division.	Teachers.	Studies.	Average Time in the School.	Time under the present Master.	No. of Pupils in the Class.	No. present at the Annual Examination.	Passed well.	Passed fairly.	Remarks.
				Months.	Months.					
I.	2nd Guj.	Jahanghir Rustamji...	Simple Multiplication.	3	1½	19	16	7	7	
„	1st „	Framji Beramji.....	Simple Division..	9	3	42	36	8	12	First examination on 9th September; 2nd on 19th October. A comparison of the results of these examinations with that of the last shows tolerable progress.
„	2nd Mar.	Bhikaji Bhaskar.....	Simple Multiplication.	3	2	26	24	8	8	The class, taught by Bhikaji before the last transferences, was examined on the 6th and 20th April, and was found making pretty good progress.
„	1st „	Gangadas Kesordas....	Simple Division..	6	5	28	27	8	13	Examined 24th August. Progress during the five months good. Gangadas' class, before the last transferences, I examined on 8th and 22nd April. Result creditable.
II.	2nd Guj.	Maneksha Beramji....	Vulgar Fractions: Subtraction.	15	5	39	38	9	19	First examination on 12th August; second on 12th October. Progress during the five months good. The class, taught by Maneksha before the last transferences, was examined on 7th and 27th April. Condition pretty good.
„	1st „	Kavazji Shapurji	Vulgar Fractions: Division.	16	5	25	23	8	14	Examined 10th August. A general attempt was observed being made to work questions proposed in the simplest manner, and not to stick to the rule. Progress during the five months creditable. The class, taught by Kavazji before the last transferences, was examined on 7th April and 27th June. Apparent improvement in the method.
„	Mar...	Namdeo Narayen till 8th October. Nanabhai Bhaskarji.	Vulgar Fractions: Subtraction.	9	1½	39	36	6	15	Examined 22nd August. Progress during the five months of its standing good. The class, taught by Namdeo before the transferences, was examined on 8th and 18th April. Result fair.

(*b*) Fort Branch School.

Arithmetic.

Class.	Division.	Teachers.	Studies.	Average Time in the School. Months.	Time under the present Master. Months.	No. of Pupils in the Class.	No. present at the Annual Examination.	Passed well.	Passed fairly.	Remarks.
I.	Guj.	Edalji Nanabhai	Simple Rules	6	5	40	38	13	17	First examination on 2nd July; second on 12th September. Progress during the five months fair. The class, taught by Edalji before the last transferences, was examined on 13th April and 29th June. Condition pretty good.
II.	,,	Sorabji Edalji.....	Vulgar Fractions: Subtraction.	12	9	36	35	13	14	Examined 11th April, 25th July, and 30th September. Progress during the nine months good.
III.	2nd Guj.	Jamshedji Rustamji ..	Reduction & Vulgar Fractions.	12	11	27	27	6	8	Examined 13th April, 29th July, and 3rd October. Progress during the eleven months fair.
,,	1st ,,	Kavazji Nasarvanji ..	Reduction & Vulgar Fractions.	18	5	35	31	7	11	Examined 1st July, 3rd August, and 28th September. Progress during the five months fair. The class, taught by Kavazji before the last transferences, was examined on 13th April. Result pretty good.

(c) Lower Central School.

Arithmetic.

Class.	Division.	Teachers.	Studies.	Average Time in the School.	Time under the present Master.	No. of Pupils in the Class.	No. present at the Annual Examination.	Passed well.	Passed fairly.	Remarks.
				Years.	Months.					
II.	2nd Mar.	Govind Vishnu	Vulgar Fractions : Division.	1	5	35	29	4	13	Examined 23rd July. Progress during the five months fair. The class, taught by Govind before the last transferences, was examined on 7th April; result pretty good.
,,	1st ,,	Harichand Janardhan.	Vulgar Fractions.	1¾	5	39	34	2	14	Examined 21st July. Progress during the five months fair. The class, taught by Harichand before the last transferences, was examined on 12th April; result indifferent.
III.	Mar....	Narayan Balal till the end of September. Dinkar Ramchandra.	Vulgar Fractions and Proportion	2½	2	34	27	1	8	This class, formed in the beginning of July, was examined on the 26th of the same month. Progress during the five months tolerable. The corresponding class before the last transferences was taught by Bal Bhaskar till the end of March, and by some of the Scholars of the College the next month. It was examined on 12th April; result indifferent.
,,	4th Guj.	Bomanji Pestanji	Vulgar Fractions and Proportion.	2	5	47	44	6	14	Examined 30th July. Progress during the five months fair. Bomanji was required to take the Candidate Class during Mr. Draper's sickness for two months, in March and April. His former class was, therefore, taught during the time by Scholars from the College, and on being examined on 23rd April was found to have suffered by being deprived of his regular tuition.

III.	3rd Guj.	Nasarvanji Naorozji ..	Proportion & Subtraction of Vulgar Fractions.	$2\frac{3}{4}$	5	40	44	10	27	Examined 2nd and 4th August. Progress during the five months good. The class, taught by Nasarvanji before the last transferences, was examined on the 19th of April. Result tolerably fair.
,,	2nd ,,	Mancherji Mervanji ..	Proportion, Simple and Compound; Vulgar Fractions, Multiplication.	3	5	33	26	9	8	Examined 6th August. Progress fair. The corresponding division, before the last transferences, was taught by Mahipatram Ruparam. It was examined on 26th April. Result indifferent.
,,	1st ,,	Khurshedji Manekji..	Proportion, Simple & Compound; Vulgar Fractions.	$3\frac{1}{4}$	5	38	30	6	17	Examined 11th August. Progress during the five months good. The class, taught by Khurshedji before the last transferences, was examined on 28th April. Result indifferent.
IV.	Mar	Babji Amritrao	Involution and Evolution.	$3\frac{1}{4}$	11	39	32	10	13	Examined 14th April and 28th July. Progress during the eleven months good.
,,	2nd Guj.	Kahandas Tapidas, till 30th September. Telakchand Manekchand.	Decimal Fractions, Division.	$3\frac{1}{2}$	2	44	40	3	17	Examined 20th August. Progress during the five months pretty good. The class of the same standing, before the last transferences, was taught by Edalji Nasarvanji. It was examined on 30th April. Result indifferent.
,,	1st ,,	Khaikhosru Hormazji.	Practice, Interest, Profit and Loss, Involution and Evolution.	$4\frac{1}{4}$	11	44	41	8	26	Examined 4th June and 23rd August. Progress during the eleven months creditable.

(d) Upper Central School.

Mathematics.

Class.	Division.	Teachers.	Studies.	Average Time in the School.	Time under the present Master.	No. of Pupils in the Class.	No. present at the Annual Examination.	Algebra.		Geometry.	Remarks.
								Passed well.	Passed fairly.	No. of Pupils who answered one or more questions correctly.	
				Years.	Months.						
V.	Mar	Govind Gangadhar..	Algebra: Simple Equations; Chambers' Geometry: Books I. and II.	4½	11	40	32	11	8	18	First examination on 28th June in algebra, and 30th June and 5th July in geometry; second on 15th and 18th October in algebra, and 20th and 22nd October in geometry. Progress during the eleven months fair.
„	2nd Guj.	Mohanlal Ranchoddas, till the middle of October. Hormazji Edalji.	Algebra: Involution and Evolution; Chambers' Geometry: Book I., with Exercises.	4½	1½	43	37	3	14	22	First examination on 9th June in algebra, and 14th June in geometry; second on 30th August in algebra, and on 1st, 3rd and 8th September in geometry. Progress during the eleven months of its standing fair.
„	1st „	Jahanghir Barjodji..	Algebra: Simple Equations of one unknown quantity; Chambers' Geometry: Book I., Book II. Props. 1—10.	4¾	11	42	35	5	7	20	First examination on 16th June in algebra, and on 21st, 23rd and 25th June in geometry; second on 10th and 13th September in algebra, and on 27th and 29th September in geometry. The principles of the rules of algebra learnt by the pupils are not professed to have been explained. Progress in algebra during the eleven months pretty good; in geometry fair.

VI.	Mixed..	Ardeshir Framji, till 30th September. Pestanji Jahanghirji. Bamanji Pestanji.	Algebra: Quadratic Equations; Chambers' Geometry: Books I.—IV.; Book VI. Props. 1—20; Chambers' Matter and Motion, pp. 44.	5	2	34	26	8	8	22	First examination on 7th and 9th July in algebra, and on 12th, 14th, 18th and 19th July in geometry; second on 4th and 6th October in algebra, and on 8th and 13th October in geometry. Progress during the eleven months of its standing fair in algebra; good in geometry. Bamanji taught this class after Ardeshir left it. It passed a creditable examination.

III.—COLLEGE.

1. LOGIC; MENTAL AND MORAL PHILOSOPHY.

First Year's Students—*Number* 44.

104. Logic supposes language, which ought, therefore, to be learnt first. In the Institution, this is so far insisted on, that, except in the case of *paying students*, who are not subjected to any examination, candidates for admission are required to be able to read and explain a passage selected from any of the books used in the School.

105. When a class in the College consisted of a few students, brought daily into direct oral intercourse with the Professors, such an amount of preparation might be sufficient. But, in order that the teaching may be carried on with effect in classes of forty or fifty students, the standard of attainment must be considerably raised.

106. The text-books used have been Easy Lessons on Reasoning, (Whately's,) and Locke's Conduct of the Understanding. The meaning and use of the technical terms have been explained, and most of the students have acquired some facility in applying the elementary rules of logic. The teaching has embraced the *language* as well as the *matter* of the text-books, and logic and grammar have been made mutually to illustrate each other.

107. The *vivâ voce* examination was chiefly on Locke. Owing to the size of the class there was not time for more than four rounds. Four out of 41 students obtained full marks, 2 obtained 95 per cent., and 7, 75 per cent. and upwards.

108. From the selected answers to the paper questions (Appendix E *a*), which embrace a considerable variety, both as to matter and style, the actual state of the class may be correctly inferred.

Second Year's Students—*Number* 21.

109. Experience here having led me to give a decided preference to text-books and familiar teaching over formal professorial

lectures, it was resolved to put Locke's Essay, and Cousin's critical review of it, together, into the hands of the students. This was intended rather, as an introduction to the study of mental philosophy, than to supersede the more systematic works of Reid, Stewart, or Brown. But, considering the relation which these bear to Locke's Essay, it was thought desirable that his work should be studied first. Cousin's criticisms are admirable specimens of philosophical analysis, and, when accompanied with illustrations adapted to the capacity and modes of thinking of the students, can scarcely fail to induce a habit of carefully *observing facts*, and of employing *experiment* and *reasoning* in dealing with them.

110. The portions read are specified in the programme. The answers to the paper questions, as written in the Examination Hall (Appendix E *b)*, do not require any remark. The mistakes, not less than the knowledge contained in them, will show the present state of the class. From a comparison of these with the selected answers of former years, a judgment might be formed regarding the progress of education in the Institution. But it is proper to mention, that papers on this subject in former years will be found only in the Third or Fourth Year's Class.

111. The *vivâ voce* answers were not given either so fluently, or in such accurate language as might be wished. From the little experience these students have had of expressing their thoughts in English, perhaps this could hardly be expected. Two out of 20 students present at the examination obtained 70 per cent. marks.

THIRD YEAR'S STUDENTS—*Number* 11.

112. In the usual course the proper business of this class would have been the study of *mental* philosophy. But, as it appeared probable that the new scholarship rules would have the effect of diminishing, at least for a time, the number of students in the higher classes, it was resolved, with the sanction of the Board, to substitute *moral* philosophy. This arrangement was recommended in anticipation of there possibly being no Fourth Year's Class,—an anticipation which has since been verified.

113. Stewart's Outlines, Part I., was read and briefly illustrated. Part II. has been studied under Professor Sinclair. The principal subject of study was Butler. (See programme, p. 9.) In this the progress was necessarily slow, the subject being new to the students, and the style of the work not free from difficulty. Still I do not know that it could be replaced by a better text-book. For besides its convenience as a comprehensive outline of morals, contained within a compass suited to the time devoted to this branch of study, it serves as a *discipline* of the intellectual powers, and at the same time affords the best *example* I know of *applied logic*.

114. The selected answers (Appendix E *c*) and Table of Results (Appendix C) show the general character of the answering, both oral and written.

General Remarks.

115. The accommodation, provided for the teaching of the College Classes here, has been from the first defective. A building, 139 feet by 20, was erected parallel to the Central School, the space between the two adjoining walls being only 13 feet in width. This was raised, like the other, to the height of two stories, and the upper story of the new building was allotted to the College Classes. By wooden partitions, constructed at different times, the whole is now divided into four rooms, somewhat unequal in size. At the one end is a chemistry lecture room. The next to this was fitted up, a few years ago, with tiers of seats, with slopes in front for books and note-books. In this room there is accommodation for 50 or 60 students; and it is the only part of the building that has any pretensions to the character of a class-room. But how far it falls short of the requirements of such will be seen from the following description.

116. Having obtained entrance to it, (which one can only do either by passing through the chemistry class-room, or through the two rooms at the other end,) you find yourself in a room, of which the two ends, floor, and ceiling are formed of wooden boards closely joined together. There are three windows on either side; but, on account of the close proximity of the adjacent building, light and air are admitted on that side very imperfectly. During a heavy monsoon shower, it becomes necessary to shut the venetians

on one side, in order to exclude the rain projected from the eaves of the adjoining roof, and the windows on the other, which is the weather side, cannot be left open. About twelve months ago, glass windows were added on that side, so that now there is generally enough of light to read or write by. But when the venetians are closed on the one side, and the glass windows on the other, there is really no ventilation, and the atmosphere is scarcely fit to support animal life. In such circumstances, vigorous and sustained mental energy is out of the question.

117. When to this it is added that in the rooms below, and immediately opposite in the adjoining range, we are at all times exposed to the inconvenience, arising from the noise inseparable from large classes of school-boys, it will be evident that teaching cannot be carried on here with spirit and effect. The other rooms have all these disadvantages, and in some respects are much inferior to this.

118. During the past year, the number of First Year's Students alone was greater than the whole number in the College eight years ago. The means and appliances for teaching, which even then were insufficient, are now utterly inadequate. It would be out of place here to go further into details. I trust that enough has been said to show that increased accommodation is urgently required, or education in the Institution, instead of continuing to advance, will be in danger of retrograding.

JOHN HARKNESS, A.M.

2. LITERATURE, HISTORY, & POLITICAL ECONOMY.

First Year's Students.

119 Literature.—In taking charge of Professor Reid's classes during his absence in Europe, I have endeavoured to keep as strictly as possible to the courses of study which had been appointed them. The Literature, as taught by me, may be divided into four branches : Prose, Poetry, and Philology, together with Compositions in English on some of the most important questions which occurred in the other departments of study.

120. *Prose and Poetry.*—With this class, though selections from the Novelists were read, still the simplicity and purity of Goldsmith's style, with the goodness of his heart, and the free and lofty sentiments which pervade Cowper, made these poets the favourite authors of study. A good deal of attention was paid to the acquisition of a *clearer articulation*, and to the modulation of the voice in reading.

121. *Philology.*—The interest manifested even by the Junior Class in this important science is most gratifying. It is superfluous to direct attention to the exercise and cultivation it gives in general to the analytic faculties ; to the lessons on the affinity of nations and their development, which it teaches with overpowering conviction ; and to the fact that probably no other equal area contains such a diversity of languages, and consequently so prolific a field for philological study, as Bombay. A slight degree of dexterity in applying some of the axioms or laws of the science has been already attained by the majority of the class.

122. *Composition.*—Great attention was paid to this important branch. In this class alone 216 essays were written on the following subjects :—Colonization ; Contests between Charles V. and Francis I. ; the Reformation ; Wealth ; Capital ; and Production ; of which, it will be observed, three are historical, and three economical. The authors read their compositions aloud in the presence of the class ; when corrections were made

in the subject matter, in the style, in the spelling and punctuation, and in the pronunciation,—these corrections emanating, or being elicited as much as possible, from the members of the class. Thus each essay was calculated at once to form an exercise in either history or political economy, in orthography, diction, and elocution, and in criticism.

123. History.—This class has read, with care, Heeren's History of the Political System of Europe and its Colonies, from the commencement of Modern History to the end of the Age of Charles V., supplemented by some chapters from Murray's India; together with Guizot's Introductory Discourse on the History of the English Revolution. Heeren and Guizot each demand a reach of thought, and an acquaintance with the springs of human action, and with the moral and political sciences, that cannot be expected from a First Year's Class. However, by the aid of oral explanations, they form, *in addition to their direct historical value*, an admirable introduction to these sciences, and an excellent gymnasium for the mind.

124. Political Economy.—Of Mr. Mill's Principles, the first eight chapters on Production, and the theory of Value, were carefully studied. Political Economy is the favourite subject with the students; and this I think is due, in a great measure, to the nature of the text-book, which illustrates the abstract principles of the science with such an abundance of excellent applications.

Second Year's Students.

125. Literature.—In *Prose* this class read selections from some of the best English thinkers and writers, such as Bacon, Locke, Boyle, Ray, Addison, &c. In *Poetry* L'Allegro and Il Penseroso were read over frequently and with great care; and the parts of Mr. Macaulay's Essay which bear on Milton's poetic merits, and on poetry in general, and Lord Bacon's profound views on poesy, together with the Classical Dictionary, served to illustrate the beauties of many passages in these exquisite poems. Some lessons and exercises were also given out of Chambers' Elocution, on the management of the voice in reading.

126. In *Philology* attention was paid in this class chiefly to the *historical* position which the elements of the English

language hold in the Indo-European family. The extent of the class's acquirements may be readily collected from their answers to the paper questions.

127. Twenty Students wrote the full number (100) of *Compositions* on the following subjects:—The Restoration in England; Louis XIV.; the War of the Succession in Spain; the Subject of Political Economy; and the Method of Investigating Economic Questions: and the same mode of correction was adopted here as in the First Year's Class.

128. History.—Heeren's Political System of Europe and its Colonies, from the commencement of the Age of Louis XIV. to the extinction of the house of Hapsburg,—illumined by the calm and sober light of the philosophic Smyth, and enforced and illustrated by the critical and historic spirit and the brilliant rhetoric of Mr. Macaulay,—formed the subject of study. Under the instruction of such authors, it is impossible not to *understand* as well as see the relations of historical events. Occasionally light was also borrowed freely from the social sciences.

129. Political Economy.—In addition to parts of the first three books of Mr. Mill's Principles, the class studied Professor Hancock's views on the Mode of Investigating Economic Questions, on the Subject of the Science, and on the Theory of Value, and Professor Green's Lectures on the Subject of Political Economy and on Remuneration; also citations were frequently made from Mr. Senior's treatise on the science. In teaching, the peculiar views of these several authors were thrown out into the greatest relief; and by this antagonism, as well as by their coincidences, an ample and firm grasp of the nature of many of the theorems and problems of the science, and of the actual state of their development, was more effectually secured.

Third Year's Students.

130. Literature.—In *Prose* the principal of Bacon's Essays, and his Remarks on Poesy, were studied with care; and in *Poetry* parts of King Lear and Hamlet.

131. *Philology*.—In this class philology was studied with great vitality, and with proportionate success; and not only has a knowledge of the leading principles of the science been acquired,

but a good deal of *sagacity* and dexterity in applying them has been frequently exhibited by several of the students. Thus, the relation which the chief members of the Indo-European family bear to each other, the most important laws which govern the letter-changes, and the doctrine of the vowels, and of the roots, have been carefully studied from Bopp, Latham, and some other sources; and the application of these laws, more particularly to the English and the vernacular languages, has formed a constant exercise. Valuable assistance in elucidating the Prakrit by means of the Sanskrit was rendered by Kaisho Sakharam Shastri, the Sanskrit Teacher in the Institution; and the Senior Philological Class was also attended by the Assistant Masters Pestonji Jehangirji, Hormasji Edalji, and Khursetji Manackji, who have taken great interest in the study, and seem to have fully appreciated its importance.

132. *Composition.*—Essays were written on the following subjects:—The Active and Moral Powers of Man; the Supremacy of Conscience; the so called Malevolent Affections; the Principles of Taxation; the best Mode of levying Taxes; and the National Debt.

133. History, which had been already studied so extensively in the Schools of the Institution, and during the two previous years of the College curriculum, was replaced, under Professor Reid, by a course of lectures on Jurisprudence; and an account of the instruction imparted in this branch from January to March will be found in Professor Reid's Report in paragraphs 137, 138.

134. To preserve as much as possible a continuity in the studies of the class, I took up, as a kindred subject, for the remainder of the year, the Second Part of Stewart's Outlines of Moral Philosophy; which, on account of its brevity, was supplemented, partly by oral expositions, and partly by citations from the ethical works of Aristotle, Cicero, Bacon, and Butler. The attainments of the class in this large and important subject are as respectable as could be expected for so short a time.

135. Political Economy.—A large portion of the important subject of Taxation, and, more generally, of Government Influence, was carefully studied; and the guiding principles and

the arguments of conflicting authorities were considered with much attention. Thus the greater part of the fifth book of Mr. Mill's Principles; Professor Heron's three Lectures on Taxation; Professor Hancock's Paper on the general principles of Taxation, as illustrating the advantages of a Perfect Income Tax, and that on the effect of the Usury Laws on the Funding System; and Mr. McCulloch's Note on the advantages and disadvantages of the Funding System compared with the plan for raising the supplies for a war, within the year, by a corresponding increase of taxation, and on the Sinking Fund; were accurately discussed. Mr. Gladstone's Budget was then analyzed; and the recent Parliamentary changes formed convenient and appropriate matter for criticism and reflection, and their general justification a good exercise in the application of the principles and doctrines of the science.

136. The Tabular Forms in Appendix C*, *a*, *b*, *c*, pp. 59, 60, 61, which contain an accurate account of the degree in which each Student acquitted himself in every question that was proposed to him throughout the Examinations in the above subjects, together with an inspection of the Examination Questions (Appendices D, D*), and of the Specimens of the Answering (Appendix E), will afford satisfactory information respecting his attainments in these several departments of study.

R. S. SINCLAIR, M.A.

3. JURISPRUDENCE.

137. The following is Professor Reid's Report of the studies of the Senior Class in Jurisprudence up to the date of his departure, 14th March (see paragraph 133) :—" Immediately after the Annual Examination (December 1852), the new Third Year's Students were introduced to a partial acquaintance with the general principles of Jurisprudence. I commenced by dictating in class a series of notes selected from Reddie's Science of Law, with occasional modifications and additions, introduced under the light reflected collaterally by other general works, such as, more particularly, Rutherford's Institutes, Austin's Province of Jurisprudence, Story's Conflict of Laws, and the valuable historical and critical introduction to Morley's Digest of Indian Cases. This preliminary matter was discussed in class for some days ; after which I further tested their progress by setting apart a day for *writing* answers to some of the questions given at the Scholarship Examinations to their predecessors ; and I am happy to state that their papers were nearly as correct, in such portions of the subject as they had studied, as those of the former students which have been forwarded to the Board.

138. " As the time now left was at most only *two months*, I thought it advisable to confine their attention to one or two branches of Private Substantive Law, and, for this purpose, selected the Cognate Titles of Family Law and Succession, (a Synopsis of the thirteen Lectures in which I appended, by way of specimens, to my Report of last year,) a department sufficiently self-contained to permit of its being studied separately, and one which, moreover, possesses peculiar attractions for Indian students, by reason of the copious and varied stores furnished for its illustration by the law-systems of the East as expounded (under the above heads) in the Classical Commentaries of Sir Thomas Strange and Sir William MacNaghten.

" R. T. Reid, LL.B."

4. MATHEMATICS AND NATURAL PHILOSOPHY.

139. In the mathematical classes, lessons were regularly prescribed from the text-books, to be studied at private hours, for examination in class. At these examinations, marks were given to the students for their answers. Separate marks were given for exercises worked at home.

140. To give them some acquaintance with the practical application of the principles taught them, I showed the First Year's Students the Land Chain, the Optical Square, the Plane Table, the Prismatic Compass, the Plane Scale, Gunter's Scale, and the Vernier, and explained their construction and use.

141. It has been usual to teach the Second Year's Students Physical Geography, but as they had not studied Hydrostatics, Pneumatics, or Electricity, I thought it necessary to give them an outline of these subjects, and to postpone the study of Physical Geography till the third year.

142. The studies of the First, Second, and Third Year's Students during the year are given in the programme, pp. 7—9.

143. There were at the beginning of the year three Fourth Year's Students, Pestanji Jahanghirji, Hormazji Edalji, and Narayan Ballal. The third having been appointed Assistant Master in the Institution on 28th June, and the two others having also obtained similar appointments on 1st October, the class at the latter date was broken up. Their studies up to this time had been, Lloyd's Elements of Optics, Chaps. I.—VIII., and Webster's Hydrostatics.

144. The selected answers given in Appendix E will show the quality of the answering.

DADABHAI NAOROJI,
Acting Professor of Mathematics and Natural Philosophy.

5. CHEMISTRY AND GEOLOGY.

145. The First Year's Students have attended two lectures a week on Chemistry throughout the Session; and in this course have studied the general properties of matter, the subjects of light, heat, magnetism, and frictional electricity; the laws of chemical combination, with the atomic hypothesis; the chemistry of the non-metallic, and of the most important of the metallic elements.

146. The Second and Third Year's Students have attended one lecture a week on Geology. The subject was treated of in accordance with the arrangement proposed in the prospectus laid before the Board at the commencement of the Session.

147. I have experienced much difficulty in conducting these lectures, from the want of adequate means of illustration. Some hand-specimens of minerals and rocks, from the collection at the Grant Medical College, and a few diagrams I had prepared whilst at the Neilgherry Hills, constituted the only objects I had at hand for illustrating the subject. A total ignorance, also, of Geological Classification on the part of the Students presented a serious impediment to their study of Palæontology. Still, however, much zeal and industry were exhibited by the majority of the class; and the interest of the subject induced most of the Assistant Masters to attend the lectures.

148. Since the close of the Session, the Committee of the Framjee Cowasjee Institute have, for the present, very liberally permitted a beautiful and extensive assortment of Minerals, Rocks, and Fossils to be placed in a room in the Institution, where I am now engaged in arranging them systematically for purposes of study. I have also employed Messrs. Smith, Elder and Co. to procure me, from London, specimens of the Geological and Zoological diagrams that are made use of by lecturers on these subjects in Europe.

149. With such increased and improved means of instruction, I trust that the geological course will in future be more complete than it was possible for me to render it in the past Session.

HERBERT GIRAUD, M.D.,
Professor of Chemistry and Natural History.

APPENDIX A.

Number and Description of Pupils in each Class.

I. BRANCH SCHOOLS.

1*st*.—MUMBADEVI.

Class.	Division. Maráthi.	Division. Gujaráti.	No. of Pupils.	No. of Pay-pupils.	Age. 9	10	11	12	13	14	15	16	17	Time in English School. Maximum.	Minimum.	Average.	Caste. Brahman.	Shenvi.	Joshi.	Parbhu.	Vania.	Sonar.	Sutar.	Khatri.	Shimpi.	Lavana.	Bhansali.	Koli.	Parsi.	Khoja.	Bhandari.	Soma-Khatrya.	Gujarati-Darji.	Bhatia.	Savak.	Kayast.	Kansar.	Beni-Israel.	Vaishya.	Govekar.	Musalman.	Kamati.	Marathi.	Bora.
														Years.	Months.	Years.																												
I.....	1st	..	28	20	1	3	8	7	3	5	1	..	..	1	3	½	5	2	..	6	..	2	1	2	..	..	..	..	..	..	..	4	..	..	..	..	1	..	..	..	3	1	1	..
	2nd	..	26	23	3	9	9	2	3	..	..	..	..	1	3	¼	..	3	4	14	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..
	..	1st	35	33	3	3	11	9	5	1	2	1	..	1	3	½	..	..	..	..	6	..	..	..	..	..	1	..	21	..	..	1	..	5	1	..	..	..	..	..	..	..	..	..
	..	2nd	20	16	..	3	5	8	3	1	..	..	..	1	3	¼	3	..	..	..	5	..	..	..	..	..	..	1	7	2	..	1	..	..	..	..	..	..	..	..	..	..	..	1
II.....	1	..	39	32	..	5	6	13	9	3	3	..	..	1	5	1	6	7	..	9	..	2	3	3	1	..	..	..	..	..	2	..	..	..	..	1	4	1	..	..	..	..	..	..
	..	1	41	35	..	3	5	13	10	4	5	..	1	2¾	3	¾	1	..	..	..	10	..	..	1	..	1	..	..	24	1	..	..	1	1	1	..	..	..	..	..	..	..	..	..
III.....	..	1	30	21	..	..	2	4	10	7	5	1	1	3	12	1½	2	..	..	..	3	..	..	4	..	..	..	..	20	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Total	219	180													17	12	4	29	24	4	5	11	1	1	1	1	72	4	2	6	1	6	2	1	5	1	1	1	4	1	1	1

2*nd*.—FORT.

Class.	Division.	No. of Pupils.	No. of Pay-pupils.	Age.								Time in English School.			Caste.							
				8	9	10	11	12	13	14	15	Maximum.	Minimum.	Average.	Vania.	Parsi.	Mogul.	Jew.	Bora.	Khatri.	Portuguese.	Bhatia.
												Years.	Months.	Years.								
I.....	....	38	35	1	6	11	14	3	..	2	1	1	5	$\frac{3}{4}$	..	37	..	1	..	..	..	..
II.....	2nd.....	34	28	1	7	11	3	10	2	..	..	1	5	$\frac{3}{4}$	2	39	..	..	..	1	2	..
	1st.....	38	33	..	..	4	10	11	8	4	..	$1\frac{1}{2}$	5	1	2	32	1	..	1	2	..	..
III.....	....	28	21	..	1	3	3	8	10	3	..	2	12	$1\frac{1}{2}$	..	26	..	1	..	..	..	1
	Total..	138	117												4	124	1	2	1	3	2	1

II. CENTRAL SCHOOL.

| Class. | Division. | | No. of Pupils. | Pay-pupils. | Age. | | | | | | | | | | | | Time in English School. | | | Caste. | | | | | | | | | | | |

III. COLLEGE.

Number and Description of Students.

	No. of Students.	Age.								Caste.											
		16	17	18	19	20	21	22	23	Brahman.	Shenvi.	Parbhu.	Vani.	Joshi.	Sonar.	Suwak.	Guj. Brahman.	Kshatrya.	Parsi.	Christian.	Bhatia.	Jain.
First Year's Students	44	2	6	10	13	10	3	..	..	4	1	11	1	..	2	..	1	4	17	1	1	1
Second Year's Students	21	..	..	4	3	5	6	1	2	2	1	6	..	1	..	1	3	2	5	..	..	..
Third Year's Students	11	..	..	..	..	..	5	3	3	2	1	3	1	..	1	1	..	..	2	..	..	..
Total....	76									8	3	20	2	1	3	2	4	6	24	1	1	1

General Comparative View of Castes.

	Hindus.	Parsis.	Musulmans.	Jews.	Christians.
I. Branch Schools	145	196	11	3	2
II. Central School	233	327	14	2	20
III. College	51	24	0	0	1
Total....	429	517	25	5	23

Grand Total.... 1,029

APPENDIX B.

GENERAL PRIZE LIST.

I. Branch Schools.

1st,—Mumbadevi.

Class.	Division.	Name.	Prize in
I....	2nd Guj.	Harkisan Mukandas	English.
		Sajan Karim	Arithmetic.
	1st Guj.	Beramji Jahanghir	English.
		Tulsidas Devidas	Gujaráti.
		Jahanghir Edalji	Arithmetic.
	2nd Mar.	Ganpatrao Lakshmanji....	English.
		Shantaram Lukshmanji ..	Arithmetic.
	1st Mar.	Damodar Gopal.....	English.
		Atmaram Vishnu.	Arithmetic and Gujaráti.
II...	Guj.	Dorabji Rustamji	English.
		Harkisan Kashidas.....	Arithmetic and Gujaráti.
		Ramprasad Trimbaknath..	Arithmetic. [ráthi.
	Mar.	Govind Vishnu	English, Arithmetic, and Ma-
		Shivaram Ganesh	Maráthi. [jaráti.
III.....	Guj.	Bejanji Dadabhai	English, Arithmetic, and Gu-
		Hormazji Ratanji	Gujaráti and Arithmetic.

2nd,—Fort.

Class.	Division.	Name.	Prize in
I.....	.....	Beramji Ardeshir	English.
		Rutanji Bhikaji.....	Gujaráti.
		Pestanji Sorabji.....	Arithmetic and Gujaráti.
II..	2nd Div.	J. A. Gonsalves DeSilva....	English.
		Sorabji Barjodji.....	Arithmetic. [metic.
	1st Div.	Manekji Barjodji	English, Gujaráti, and Arith-
		Moleshwar Lakshman	English and Gujaráti.
		Khurshedji Framji.....	Arithmetic.
III....	.....	Mervanji Beramji	English and Gujaráti.
		Dhanjibhai Shapurji	English, Gujaráti, and Arith- [metic.

II. Lower Central Schoc

Class.	Division.	Name.	Prize in
			[Maráthi.
II	Mar.	Ramchandra Mahadeva ...	English, Arithmetic, and
		Harichand Sakharam	English. [metic.
III..	2nd Mar.	Bhaskar Shivaram.....	English, Maráthi, and Arith-
		Mahadeva Vishvanath	English.
	1st Mar.	Mahadeva Haritrimbaka ..	English and Arithmetic.
		Sundar Bhaskar	Arithmetic and English.
	4th Guj.	Kavazji Rustamji	English and Gujaráti.
		Kavazji Edalji, Junior	English.
		Bomonji Sorabji.....	Arithmetic.
	3rd Guj.	Pestanji Edalji.....	English and Arithmetic.
		Ali Mahamad Bhunji.....	English.
		Thakurdas Beyabukandas..	Gujaráti and Arithmetic.
		Sorabji Shapurji.....	Arithmetic.
	2nd Guj.	Mervanji Hormazji	English.
		Edalji Jamshedji	English.
		Dadabhai Ratanji	Gujaráti.
	1st Guj.	Framji Bomanji.....	English and Gujaráti.
		Framji Shapurji.....	English.
		Dyal Mulji }	Arithmetic.
		Kavazji Kuvarji }	
IV ..	Mar.	Sádashiva Anant }	English.
		Janardhan Keshava }	
		Ramchandra Dhondeo.....	Maráthi.
		Keroba Damodhur }	Arithmetic.
		Baba Narayan }	
	2nd Guj.	Hormazji Jahanghir	English and Gujaráti.
		Beyabhukan Atmaram.....	Gujaráti and English.
		Narbhiram Ramshankar }	Arithmetic.
		Pestanji Dosabhai }	
	1st Guj.	Nasarvanji Dhunjibhai....	English and Gujaráti.
		Fazil Mahamad	English.
		Bahodji Kavazji }	Arithmetic.
		Palanji Pestanji }	

III. Upper Central School.

Class.	Division.	Name.	Prize in
V...	Mar.	Sadanand Balkrishna	English, History, Maráthi, [and Mathematics.
		Narayan Mahadeo.....	History and English.
		Purshotum Balaji.....	Mathematics. [jaráti.
	2nd Guj.	Kavazji Mehernozji	English, History, and Gu-
		Dalpatram Pranjivan	History and English.
		Motiram Trikamdas }	Mathematics.
		Pestanji Kavazji }	
	1st Guj.	Rustamji Hormazji	English and Gujaráti.
		Mancherji Dissha.....	History.
		Kavazji Dhunjibhai	History.
		Beramji Bhikaji	Gujaráti.
		Jamshedji Adarji }	Mathematics.
		Nasarvanji Dorabji }	
VI...	2nd Div.	Jamshedji Nasarvanji	English.
		Naorozji Shapurji.....	English.
		Sókar Bapuji.....	Sanscrit.
		Kavazji Hirjibhai	Persian.
		Uttamram Narbheram....	History.
		Dhunjibhai Rustamji.....	History. [Philosophy.
		Kavazji Nasarvanji	Mathematics and Natural
		Bomanji Sorabji	Mathematics.

APPENDIX C.

GENERAL RESULTS OF ANNUAL SCHOLARSHIP EXAMINATION,

DECEMBER 1853.

a.—Candidates for Clare (Junior) Scholarships

Class.	Order of merit.	NAMES.	Language.		History and Geography.		Arithmetic and Mathematics.		Value.	
			Viva voce.	Paper.	Viva voce.	Paper.	Viva voce.	Paper.	Answers returned.	Full Answers.
		Value..	40	60	20	80	40	60		
FREE STUDENTS.	1	Ramcrishna Gopal	37	43	20	70	32	44	252	300
	2	Murlidhar Girdhar	34	41	20	73	29	51	248	
	3	Tribhuvandas Dwarkadas ..	32	31	20	75	25	43	226	
	4	Edalji Nasarvanji }	34	35	20	74	22	40	225	
	5	Vinayak Narayan }	36	44	16	75	17	37	225	
	6	Javirilal Umiashankar	33	37	10	71	20	47	218	
	7	Fardunji Beramji	37	23	20	67	27	38	212	
	8	Dadabhai Pestanji	40	18	16	65	24	47	210	
	9	Thamrao Bhaskar	38	31	20	71	15	29	204	
	10	Rustamji Manekji	35	35	20	70	11	20	203	
	11	Mancherji Bamanji	32	17	18	65	23	39	194	
	12	Beramji Naorozji }	27	18	10	75	21	40	191	
	13	Sokar Bapuji }	28	39	8	71	11	34	191	
	14	Damodhar Mayaram..	13	37	8	56	20	48	188	
	15	Raghunath Janardhan.....	16	22	20	60	20	35	179	
	16	Nasarvanji Jamasji	22	26	12	68	24	27	108	
	17	Kavazji Hirjibhai	19	28	6	63	12	30	158	
	18	Jumshedji Bulanji	28	14	16	53	17	28	156	
	19	Manek Balaji	8	32	10	43	14	30	152	
	20	Rustamji Sorabji.....	13	26	16	74	5	15	149	
	21	Pestanji Naoroji	16	24	12	50	11	29	142	
	22	Waman Vinayaka.....	8	35	4	40	18	24	138	
	23	Sorabji Framji	32	25	12	20	21	18	131	
	24	Kharshedji Sorabji }	15	7	8	38	22	43	133	
	25	Sorabji Nasarvanji }	29	11	8	62	0	20	133	
	26	Bhai Jivanji	5	22	12	21	24	38	122	
	27	Rustamji Fakirji.....	5	8	8	51	15	31	118	
	28	Motiram Maneklal	0	10	16	12	33	23	103	
	29	Pundlic Anunt	4	17	0	40	9	31	101	
	30	Jamshedji Beramji	8	11	16	35	12	10	92	
	31	Dosabhai Daruska }	18	16	0	34	4	17	89	
	32	Kavazji Nasarvanji }	0	14	14	13	17	31	89	
	33	Bejanji Naorozji	9	2	4	35	15	22	87	
	34	Kharsedji Dhunjibhai	8	21	4	25	7	18	83	
	35	Ardeshir Dhunjibhai }	8	24	0	30	0	10	81	
	36	Mansukh Narsidas }	0	21	2	14	24	20	81	
	37	Ranchoddas Girdhardas	31	0	10	12	3	12	68	
	38	Dhunjibhai Rustamji }	0	0	12	28	9	10	67	
	39	Hormazji Pestanji }	0	0	8	7	9	34	67	
	40	Dorabji Hormazji, Junior....	8	13	0	21	15	9	66	
	41	Dorabji Hormazji, Senior....	9	0	12	26	0	14	61	
	42	Kharsedji Nasarvanji	0	0	8	11	8	17	47	
NOT QUALIFIED.	43	Anundrao Vasudeva.....	0	10	4	0	13	10	37	

b.—First Year's Students.

Class.	Order of merit.	Names.	Subjects.					Value,	
			Logic.	History, Literature, & Political Economy.	Mathematics & Natural Philosophy.	Chemistry.	Translation.	Answers returned.	Full Answers.
		Value..	100	100	100	60	40		
West Scholar.	1	Shridhar Vithal	81	85	65	46	26	303	400
Clare Scholars.	2	Dadabhai Rustamji	69	85	78	41	26	299	
	3	Jagannath Narayan	71	90	61	46	27	295	
	4	Jahanghir Framji	65	84	75	44	24	292	
	5	Hormazji Dadabhai	66	84	67	45	22	284	
	6	Pestanji Edulji	63	81	71	35	23	273	
	7	Ambaram Kevalram	64	77	76	24	13	254	
	8	Pandurang Hari	54	70	56	34	25	248	
	9	Rustamji Ardeshir	54	53	79	41	15	242	
	10	Bal Govind	57	76	61	24	22	240	
	11	Kuvarji Barjodji	49	61	78	28	21	237	
	12	Shivshankar Govindram	58	62	59	27	27	233	
	13	Barjodji Framji	43	68	61	33	25	230	
	14	Shricrishna Narayan	59	55	64	27	20	225	
	15	Nanabhai Haritrimbaka	55	41	61	35	19	211	
	16	Karsandas Mulji	45	63	50	31	19	208	
	17	Muncherji Dorabji	44	40	87	23	3	208	
	18	Muncherji Beramji	62	60	32	43	15	202	
	19	Mahadavrao Bhaskar	42	53	48	27	24	194	
	20	Phirozsha Kavasji	51	60	37	25	20	193	
	21	Fakerji Pestanji	44	56	40	27	25	192	
	22	Dhirajlal Mathuradas	50	53	38	19	33	193	
	23	Keshavrao Bhaskar	42	53	58	20	18	191	
	24	Dinkar Ramchandra	59	38	52	33	0	191	
	25	Shamrao Pandurang	27	48	62	28	23	188	
Free Students.	26	Gopinath Sadashiva	43	50	40	31	17	181	
	27	Framji Tamulji	37	52	25	39	25	176	
	28	Hardayaram Anupram	20	40	69	16	15	172	
	29	Mahadavrao Kanoba	45	43	30	29	18	165	
	30	Phirozsha Mirjibhai	41	55	29	25	12	162	
Paying Students.	31	Rustamji Manekji	40	25	64	15	11	155	
	32	Ganpatrao Raghoba	30	41	24	33	23	151	
	33	Jahanghir Jamsheddi	29	41	37	23	19	149	
	34	Kakobad Kavasji	22	47	30	26	14	145	
	35	Bhaskar Balcrishna	43	30	30	13	14	130	
	36	Babaji Kashinathji	21	47	33	24	12	137	
	37	Vishnu Raoji	21	31	40	16	23	131	
	38	Bamanji Bhicoji	21	44	38	18	10	131	
	39	Harkisandas Govardhandas	39	23	25	13	14	114	
	40	Ramdas Bhanji	..	..	..	..	25	25	
	41	Ganpatrao Moroji	5	..	..	6	12	23	

c.—*Second Year's Students.*

Class.	Ordinary.	Names.	Subjects.					Value.	
			Mental Philosophy.	History, Literature, & Politi-cal Economy.	Mathematics & Natural Philosophy.	Chemistry and Geology.	Translation.	Answers returned.	Full Answers.
		Value..	100	100	100	60	40		
2ED NORMAL SCHOLAR.	1	Ganesh Dhondeo	54	85	89	30	25	283	400
WEST SCHOLARS.	2	Edalji Shapurji	61	83	71	41	27	283	
	3	Motilal Jevandas.....	57	74	66	32	25	254	
	4	Pandurang Balibhadra	59	73	52	47	28	253	
	5	Somnarayan Nandnarayan	60	51	72	20	26	229	
	6	Mahipatram Ruparam	60	67	45	34	22	228	
	7	Ganpatrao Bhaskarji	42	67	69	29	18	225	
	8	Nilkanth Mahadeva.....	59	48	62	21	16	206	
	9	Parashuram Vishnu	60	61	20	24	25	190	
	10	Harichand Antoba	50	38	69	16	17	190	
	11	Dadabhai Mancherji.....	34	68	31	20	28	181	
	12	Darasha Dorabji	40	67	4	13	31	161	
NOT QUALIFIED.	13	Parbhuram Navalram	26	53	28	12	30	149	
	14	Ramcrishna Narayan.....	37	32	30	24	25	148	
	15	Sorabji Rustamji.....	32	37	27	28	22	146	
	16	Moroba Sundarji	34	31	37	21	22	145	
	17	Dwarkanath Jagannath	27	39	34	24	21	145	
	18	Kavazji Nasarvanji.....	18	45	28	31	20	137	
	19	Harichand Withoba.....	26	25	33	25	21	130	
	20	Sakharam Govindji.....	23	29	17	32	15	116	

d.—Third Year's Students.

Class.	Ordinary.	Names.	Subjects.					Value.	
			Moral Philosophy.	Political Economy, Ethics, and Literature.	Mathematics and Natural Philosophy.	Chemistry and Geology.	Vernacular Essay.	Answers returned.	Full Answers.
		Value....	100	100	100	60	40		
1st Normal.	1	Balcrishna Sadashiva.....	74	85	67	50	30	306	400
	2	Bhairaonath Mangesh.....	76	79	69	42	24	290	
	3	Pardunji Jamshedji.....	49	51	85	36	32	253	
2nd Normal.	4	Harrishankar Balcrishna	61	73	47	35	28	244	
	5	Khurshedji Manekji*	49	63	45	37	22	216	
	6	Kahandas Tapidas	33	63	72	27	16	211	
	7	Telakchand Manekchand	56	65	48	22	14	205	
	8	Jahanghir Rustamji †.....	47	49	56	21	20	193	
	9	Mahadaji Vasudeva	48	47	51	29	15	190	
	10	Naorozji Beramji.....	34	49	29	41	10	163	
	11	Ganpat Madanji	..	..	..	..	..	..	
Not Qualified.	12	Mancherji Mervanji	42	35	23	21	8	129	
	13	Govind Vishnu.....	27	21	27	10	10	95	

* Assistant Teacher, Elphinstone Institution.

† Master of a Portuguese Charity School, Mazagon.

APPENDIX D.

SCHOLARSHIP EXAMINATION PAPERS, 1853.

CANDIDATES FOR CLARE *(JUNIOR)* SCHOLARSHIPS.

7th December.—From 11 to 2.

TRANSLATION.

Professor HARKNESS.

(Into Maráthi or Gujaráti.)

VIRTUE.

"Bad as the world is, respect is always paid to virtue. In the course of human affairs, it will be found that a plain understanding, joined with acknowledged worth, contributes more to prosperity than the brightest parts without probity or honour. Whether science, or business, or public life be your aim, virtue still enters for a principal share into all those great departments of society. It is connected with eminence in every liberal art, with reputation in every branch of fair and useful business, with distinction in every public station. The vigour which it gives the mind, and the weight which it adds to character, the generous sentiments which it breathes, the undaunted spirit which it inspires, the ardour of diligence which it quickens, the freedom which it procures from pernicious and dishonourable avocations, are the foundations of all that is high in fame or great in success among men."

7th December.—From 2 to 5.

(Into English.)

कोलम्बस बार्सिलोना एथें जातअसतां आसपासच्या गांवचे लोक जमा झाले, आणि हा जिकडेस चालला होता तिकडे याचे पाठीमागून सानंदाश्चर्य करीत आणि वाहवा वाहवा म्हणतच चालले. ज्या महत्कृत्या मुळें फेर्दिनान्द आणि इसाबेल्ला यांचे राज्यास इतकें तेज चढलें त्या महत्कृत्यास योग्य असा समारंभ करून त्या उभयतांच्या आज्ञेवरून कोलम्बसास शहरांत आणिलें. नवीन शोधून काढलेल्या देशापासूंन कोलम्बसानें जे आपले बराबर लोक आणिले होते ते सर्वांच्या पुढें होते, तेसमयीं त्यांचे मुखाचा चमत्कारिक वर्ण, त्यांची चमत्कारिक रानवट आकृति आणि त्यांचे विलक्षण पोषाख यांवरून तीं दुसऱ्याच जातीचीं मनुष्यें आहेत असें दिसलें. त्या लोकांचे पाठीमागून तद्देशीय लोकांच्या अशिक्षित कौशल्यानें केलेले सुवर्णाचे अलंकार, व पर्वतामध्यें सापडलेले सोन्याचे रज आणि नद्यांमधून जमाकेलेला चूर हे पदार्थ आणिले. त्यामागून नवीन शोधून काढलेल्या देशांतील नानाप्रकारचे जिन्नस व तेथील चमत्कारिक पदार्थ दृष्टीस पडले. नंतर अशा समारंभा सहवर्तमान स्वतां कोलम्बस शहरांत आला; आणि हा चमत्कार पाहाण्याकरीतां जितके लोक जमले होते तितक्या सर्वांच्या दृष्टी यानें आपले कडे आकर्षून घेतल्या; व ज्यानें आपले चातुर्यानें आणि धैर्यानें प्राचीन कालीं अज्ञात अशा मार्गानें स्वदेशीय लोकांस नवीन जगाचें ज्ञान करून दिलें अशा लोकोत्तर पुरुषाकडे सर्व लोकही टकटका पाहात राहिले.

Or,

કોલમ્બસ બાર્સિલોના જવાને નિકળ્યો, વાટમાં આસપાસના ગામડાંના લોકો એકઠા થયા, અને સાનંદાશ્ચર્ય પામીને તેની પાછળ વખાણ કરતા ગયા. ફર્દિનાન્દ અને ઇસાબેલ્લા એમ્બોના વખતમાં હોટું સાહસ કર્મ સિદ્ધ થયાથી તેમ્બોના રાજ્યને હોટી શોભા મળી માટે તેમ્બોના હુકમથી કોલમ્બસને શેહેરમાં માનની સાથે તથા ધુમધામથી લોકો તેડી લાવ્યા. તે નવા દેશના જે માણસો લાવ્યા હતા તેમ્બોને આ હોટી સ્વારીમાં આગળ ચલાવ્યા. આ માનસોના અજાયબ સરખાં વર્ણ તથા શિકલ અને બીજી તરેહનાં જ્ઞાન હતાં, તેથી તેમ્બો જુદા પ્રકારના મનુષ્ય, જેવા દિસવા લાગ્યા. નવા દેશોના જંગલી લોકોએ બનાવેલા સોનાનાં ઘરેણાં

તથા ત્યાંહાંના પાહાડોમાંથી મળેળી સોનાની રજો તથા ત્યાંહાંની નદિયોમાંથી કાહોડેલી સોનાની ધૂળ કોલમ્બસે પોતાની સાથે લાવી હતી; આ સર્વ વસ્તુઓ સ્વારીમાં એ જંગલી લોકોની પાછળ આવી; ત્યારપછી ત્યાંહાંની નાનાપ્રકારની વ્યાપારની જનસો તથા નવી તરેહની પેદાશની ચીજો પાછળ આવી; સ્વારીની આખરે કોલમ્બસ બિરાજે; અને જે દેશોમાં જવાનો માર્ગ આગળના વખતમાં કોઇને માલુમ ન હતો તે દેશો, જે પુરૂષે, પોતાના ઉત્કૃષ્ટ બુદ્ધિ તથા ધૈર્યના બળે કરીને સ્પાનિઅર્દ લોકોને બતાવ્યા એવા માહાન પુરૂષને લોકો સાનંદાશ્ચર્યથી ન્યાહાળીને જોવા લાગ્યા.

8th December.—From 2 to 5.

HISTORY.

Professor SINCLAIR.

1. The Ionian and Dorian races were distinguished by striking characteristics? How were they disposed towards Commerce respectively? The advantages and disadvantages of the Dorian institutions when compared with the Ionian?

2. The more rapid development of Political Science in Greece than in any other country is due to another very marked feature in the political condition of Greece? The Greek name of the Supremacy of the principal State, and *what rights* did it imply? Draw a *map* of Greece, containing its divisions, and *some* of its *cities*.

3. In what year B. C. was the "City Founded"? Could you convert the year 244 U. C. into Olympiads? In what year was Royalty abolished, and why, and *by what part* of the community? The Tribunician power was formidably increased by the "*Lex Valeria,*" and in what year?

4. Consequences of the Crusades to the Papal power, and to that of the Monarchs generally? Brief history of Chivalry after the Crusades? Monuments of the Red Cross Knights and of the Hospitalers still exist in London? Indirect influence of the Crusaders on Commerce?

5. The origin of the first permanent foundation of British freedom? A certain innovation laid the basis of the present

House of Commons? During the reign of Edward III. the Parliament established the *three Fundamental Principles* of the British Constitution?

6. Candidates for the Succession in Spain? Brief account of the Partition Treaties? What were the avowed objects of the "Grand Alliance"? This Treaty might probably have been frustrated?

9th December.—From 2 to 5.

MATHEMATICS AND NATURAL PHILOSOPHY.

Acting Professor DADABHAI NAOROJI.

1. If 20 men, working 12 hours daily, reap $80\frac{1}{3}$ acres in 15 days and 3 hours, in what time would 30 women, working $10\frac{1}{2}$ hours daily, reap $143\frac{3}{4}$ acres; 8 men being able to reap as much as 9 women in the same time?

2. $\left.\begin{array}{l} x^2 + y^2 + x + y = m \\ x^2 + x - y^2 - y = n \end{array}\right\}$; find x and y?

3. In what time will an Annuity of £20 amount to £1000, at 4 per cent. compound interest?

4. 37th Proposition of the 3rd Book of Euclid?

5. If lines be drawn from the angular points of a triangle, through any point within it, to meet the opposite sides, and the points of section be joined, the former lines will be cut harmonically?

6. In a triangle $tan\,A + tan\,B + tan\,C = tan\,A\,tan\,B\,tan\,C$?

7. Suppose that from the top of a mountain, 3 miles high, the angle of depression of the remotest visible point of the earth's surface is taken and found to be 2° 13′ 27″; it is required thence to determine the diameter of the earth, supposing it to be a perfect sphere?

8. Fundamental laws of the force of Gravitation?

9. The Thermometer?

FIRST YEAR'S STUDENTS.

12th December.—From 11 to 2.

TRANSLATION.

Professor HARKNESS.

(Into Maráthi or Gujaráti.)

INTEGRITY.

"Integrity is the foundation of all that is high in character among mankind. Other qualities may add to its splendour, but if this essential requisite be wanting all their lustre fades. Were I drawing the character of one who claimed the admiration of the world, and after I had ascribed to him eloquence, valour, and every endowment that is most shining and captivating, did I add that he was a man of too much art to be trusted, I appeal to every one whether by this single stroke the whole character would not be sunk and degraded? An interested and crafty man may, perhaps, rise into influence and high station; he may be a rich and a powerful, but he will never be a great, man. He may be feared, and externally honoured and courted, but in the secret thoughts of men he finds no respect. We all feel that magnanimous sentiments cannot dwell in the same breast with selfishness and deceit.

"He who rests upon an internal principle of virtue and honour will act with a dignity and a boldness of which they are incapable who are wholly guided by interest. He is above those timid suspicions and cautious restraints which fetter and embarrass their conduct. That firmness, which the consciousness of rectitude inspires, gives vigour and force to his exertions on every great occasion. It adds double weight to all the abilities of which he is possessed. It even supplies the place of those abilities in which he is defective. They who oppose him are obliged to honour him. How corrupt soever the world may be, they cannot withhold approbation from him whose conduct is marked by uniform integrity and honour."

(Into English.)

દુનિયેચ્યા અવઘ્યા વ્યવહારાંત સત્ય હા એક મોઠા શ્રેષ્ઠ પદાર્થ હોય. આપલ્યાવિષયીં આણિ આપલ્યા શેજાર્‍યાવિષયીં જી કાંહીં ગોષ્ટ અસેલ ત્યાંતચ સત્યાકડેસ લક્ષ ઠેવાવેં અસેં નવ્હે, તર સર્વ ગોષ્ટીવિષયીં સત્યાચા નિર્ણય કરણ્યાકરિતાં તે પાહાત અસાવેં આણિ તેં દૃઢ ધરાવેં. ઇતિહાસ પઠણેં ઝાલેં તર યા પ્રકરણી જે ઉત્તમ પ્રમાણ સિદ્ધ ગ્રંથ તે મિળવિણ્યા વિષયીં યત્ન કરાવા. શાસ્ત્રાંત શ્રમ કરણેં ઝાલેં તર સમાધાનપૂર્વક જેં સિદ્ધ ઝાલેં નસેલ ત્યાચા સ્વીકાર આપલ્યાકડૂન હોત નાહીં અસી આપલી ખાત્રી અસાવી. એખાદે ગોષ્ટીચા ખરેપણા ચાંગલ્યા પ્રમાણા વાંચૂન દુસરા કશ્યાનેં સિદ્ધ હોણાર નાહીં આણિ ઝાલેલ્યા કાર્યાચા પ્રયોગ આણિ આસ્થેવાઈક અવલોકન કેલ્યાવાંચૂન વિદ્યા શાસ્ત્રાંતીલ કોણેએકે ગોષ્ટીચા ખરેપણા દુસરા કશાનેં સિદ્ધ હોણાર નાહીં હેં ખરેં આહે, ભ્રમાનેં સંસ્થાપિત નવ્હે, અસા આપલા નિશ્ચય ઝાલ્યાવાંચૂન, આણિ તો નિશ્ચય સત્યનિષ્ઠાપૂર્વક કરૂન ઘેણ્યાવિષયીં શ્રમ કેલ્યાવાંચૂન કોણતેંહી મત આપલ્યા મનાંત આપણ રાહૂં દેઊં નયે. હરએક ભ્રાંતીચેં મત અથવા જેં કાંહીં ખોટેં અસેલ ત્યાજવિષયીં કલ્પના કરણેં યાજપાસૂન જગાંત વાઈટાચી પ્રવૃત્તી હોતી, પરંતુ જેં કાંહીં ખરેં અસેં આપલ્યાસ કળલેં તેં, આણિ ખરેપણાનેં સંસ્થાપિત ઝાલેલેં જેં પ્રત્યેક મત આણિ જી કલ્પના આપલ્યાસ સમજતી, ત્યાંજપાસૂન લોકાંત ચાંગલ્યાચી પ્રવૃત્તિ હોતી.

Or,

દુનિઆદારીનાં સર્વ કામોમાં સાચું બોલવું એ મ્હોટું અગત્યનું છે. આપણને અને આપણા પડોસીને લગતી જે કાંઈ વાત હોય, તેમાંજ સત્યતરફ લક્ષ રાખ્યું એમ નથી, પણ સર્વ વાતોમાં સત્યનો નિર્ણય કરવા માટે ધ્યાન રાખ્યું અને તેને દૃઢ રીતિ વળગી રહેવું. જો આપણે ઇતિહાસનું અધ્યયન કરતા હોઇએ તો અતિ સારી સત્તાવાળાં પુસ્તકો મેળવવાનો પ્રયત્ન કરવો જોઇએ, જો આપણે વિદ્યાનો સુધારો કરવા ચાહતા હોઇએ તો જે વાતો યથાસ્થિત સિદ્ધ થઈ નથી તેઓને સ્વિકાર ન કરવો એવી આપણી ખાતરજમા રાખવી. કોઇપણ બિનાની સાચાઈ સારા પ્રમાણ વિના બીજા કશાથી સિદ્ધ થતી નથી; તેમજ પ્રયોગ તથા સંભાળલેઇને કીધેલાં અવલોકન વિના બીજા કશાથી વિદ્યામાં કોઇપણ વાતની સાચાઈ સિદ્ધ થતી નથી, જાંહાંલગી આપણી ખાતરનિશાં થાય અને તે વાત ખરી છે, એમ આપણા અંતઃકરણમાં વસે તાંહાંલગી તે

ખરી છે અને તેમાં કાંઈ ચુક નથી, એવું મત આપણા મનમાં ઠસી જવા દેવું નહી. પ્રત્યેક ખોટા મતથી, અથવા જે જુઠી હોય, એવી વાતની કલ્પના કીધાથી સૃષ્ટીમાં નુકસાન પોંહોંચેછે. પણ જે કાંઈ આપણાથી સાચું સમજાયછે તેથી તથા પ્રત્યેક મત અને કલ્પના જે આપણને બરોબર આધારસહિત જણાયછે તેથી માણસ જાતીના સારાની પ્રવૃત્તી થાયછે.

December 13th.—From 2 to 5.

ELEMENTS OF LOGIC.

Professor HARKNESS.

1. Define Syllogism, and state the conditions which every valid Syllogism must fulfill.

2. What is the rule with regard to the distribution or non-distribution of the predicate in affirmative or negative propositions? Explain and illustrate the reason of the rule.

3. Explain, and give instances of, the perplexity occasioned by the ambiguous use of the *causal* and *illative* conjunctions.

4. Of what two kinds are the objections in an Enthymeme, and what is the only difference in the two cases?

5. Why does each of the propositions, "All equilateral triangles are equiangular," and "All equiangular triangles are equilateral," require a distinct proof?

December 14th.—From 2 to 5.

CHEMISTRY.

Professor GIRAUD.

1. In what manner is Heat propagated through solids and through liquids? Describe some experiments in proof of what you state.

2. What are the forces that constitute a Ray of Solar Light; how may they be separated from each other, and their separate qualities demonstrated?

3. Which is the most abundant Element; in what conditions does it chiefly exist in nature; how may it be procured for experimental purposes; and what are its leading properties?

4. State the compounds which Phosphorus forms with Oxygen; and mention the leading properties of Phosphoric Acid.

5. What do you mean by Frictional Electricity; and how may it be developed?

6. What is Magnetic Induction?

December 15th.—From 2 to 5½.

I. HISTORY.

Professor SINCLAIR.

1. The *Principles* which held the European States-System together, and which guaranteed the security and independence of the weak against the strong, according to Professor Heeren? Show in what manner they brought about these beneficial results?

2. The history of Modern Europe may be divided into three periods, according to the different forms which practical politics assumed? The *duration* of each period? The *characters* of each? And how are they *related* severally to the *balance of power?*

3. *Colonies* may be divided, according to their nature and object, into four classes? The *way* in which the discoveries and settlements of the Portuguese were made, and the *state* of the *countries* discovered, caused, from the beginning, the colonial affairs of Portugal to differ widely from those of Spain?

4. Short account of the naval expeditions of the Portuguese? Though the Portuguese trade with India was not monopolized by any particular Company, still there was a species of monopoly, in which lay the seeds of its ultimate ruin?

5. Enumerate the points on which, according to Heeren, the political history of the Reformation turns? The progress of the Reformation was mainly determined by the *character* of the nations among whom it prevailed? Origin of the Society of the Jesuits, and outline of its internal organization?

6. What causes, according to M. Guizot, have given to the English Revolution the solid success which France and Europe have hitherto sought in vain? A superficial view of Protestantism is refuted by Guizot? The English *Political* Reformers had many guarantees for their moderation?

II. BACON ON POESY; GOLDSMITH, COWPER.

1. Poesy is referred by Bacon to what Faculty, and why? The *use* of Poetry, in the sense of "feigned history," is *threefold:* explain this fully? The functions of Poesy and Reason contrasted?

2. "Its uplands sloping *deck* the mountain's side,
Woods over woods in gay *theatric pride;*
While oft some temple's mouldering *tops between,*
With venerable grandeur mark the scene.
* * * * *
While *sea-born* gales their *gelid wings* expand,
To *winnow* fragrance round the *smiling* land."

Explain these lines? Parse the words "tops between"? The last couplet illustrates some of the licenses of Poesy?

3. "Pleased with his guests, the good man learned to *glow,*
And quite forgot their vices in their woe;
Careless their merits or their faults to scan,
His *pity* gave ere *charity* began."

Explain?

4. "'Tis born with all: the love of Nature's work
Is an *ingredient* in the *compound* man,
Infused at the creation of the kind.
And, though the Almighty Maker has throughout
Discriminated each from each, by *strokes*
And *touches* of his *hand,* with so much art
Diversified, that two were never found
Twins at all points—yet this *obtains* in all,
That all discern a beauty in his works,
And all can *taste* them."

Explain?

December 16th.—From 2 to 5½.

I. POLITICAL ECONOMY.

Professor SINCLAIR.

1. State accurately the subject of Political Economy, as treated by Mr. J. S. Mill? *Meaning* and *extension* of *Productive* Labour with Mr. Mill? Mr. Mill's objections to Political

Economy being considered the Science of Exchanges, or the Science of Values? Such views may, according to him, be traced to an "error too common in political economy"?

2. The Requisites of production? The modes in which labour is *indirectly* instrumental to production, as classified by Mr. Mill?

3. The distinction between Circulating and Fixed Capital, adopted by Mr. Mill? Increase of Fixed Capital at the expense of Circulating must be, temporarily at least, prejudicial to the labouring class? In the long run, it seldom, if ever, is so?

4. Ambiguities in the term Value, and its meaning in Political Economy? The distinction between Value and Price exposes some popular errors about "general rises"? A rise or fall of general prices to whom important, and to whom not?

5. Conditions that a commodity may have value in exchange? Adam Smith's "effectual demand"? Law of the Value of commodities which are absolutely limited in supply?

6. The Universal element of Cost of production, and the Occasional? How far are Wages an element in Cost of production? And how far are Profits? Law of the Value of commodities which may be indefinitely multiplied, but not without increase of Cost?

II. PHILOLOGY.

1. The Native Country of the English Language? The district in England where the original British language was first superseded? The *names* of certain *Counties* in England indicate *who* the tribes were that formed the next three settlements? The accredited chronology of their invasions?

2. The three Fundamental Vowels? Their *pronunciation?* Their Hindustani [Arabic] vowel-letters?

3. Into what classes are the Sanscrit Consonants usually divided? By *letter-changes*, show the *identity* of the words "physics" and "being"? "Mercy" is a mutilation of a certain Latin word, a *part* of which is *identical* with "heart": what is the Latin word, and by what *letter-changes* do you show the identity referred to?

4. Point out distinctly the *pronominal* elements which form a part of "am," "dost," "doth"; and give the Vernacular equivalents of these elements?

5. The roots of "deter," "inter," "cousin," "balance"? The Sanscrit roots in "navigation"?

6. In order to show the affinity that exists among some of the Indo-Germanic languages,—of the words *man, woman, father, mother, son,* and *daughter,* write the equivalent words in as many languages as you can?

December 17th.—From 2 to 5.

MATHEMATICS AND NATURAL PHILOSOPHY.

Acting Professor DADABHAI NAOROJI.

1. Prove Napier's analogies.

2. The area of a spherical triangle is proportional to its spherical excess?

3. Required the distance between Bombay, in Lat. 18° 56′ N., Long. 72° 57′ E., and Calcutta, in Lat. 22° 34′ N., Long. 88° 26′ E.?

4. Given the time of the Sun's setting, and his altitude at 6 o'clock on the same day, and at the same place; to find the latitude and the declination?

5. An equation of the nth degree has n roots and no more?

6. The theory of vanishing fractions?

7. Calculate the common logarithm of 3.

8. Describe the construction and use of the prismatic compass.

9. Explain the terms *accelerating force, resultant,* and *centre of oscillation?*

10. Explain the law of *virtual velocity,* and apply it to the screw.

SECOND YEAR'S STUDENTS.

5th December.—From 11 to 2.

TRANSLATION.

Professor HARKNESS.

(*Into Maráthi or Gujaráti.*)

Men ought to be so brought up as to look with a reverent eye upon the civil ordinances of life. Almost the greatest distinction between wise and good men and the thoughtless and reckless is, that the former are ever anxious to get the utmost good out of all that is around them. They see that what with the difficulty occasioned by the acute disorders of the world, such as failing harvests, wars, pestilences,—and also by the chronic complaints, namely the daily troubles and distresses of life, government is a very serious matter, and they learn to regard it religiously. They see, or, perhaps, feel more than see, that withal there is a spirit of beneficence and order throughout creation, and they are conscious that they are acting in consonance with the great laws of the universe, and the will of their Maker, in endeavouring to make human affairs go on well and wisely. This reference to something above them and beyond them gives earnestness to their wish to improve civil institutions, takes away recklessness in doing so, represses selfishness, establishes justice, and reproves self-will. Without piety there will no be good government.

5th December.—From 2 to 5.

(*Into English.*)

कोलम्बसानें जी ही नवीन सृष्टि शोधून काढिली तींत प्रथमतः पाऊल ठेवणारा युरोपीअन कायतो हाच होता. कोलम्बस उंच पोषाख आंगावर घालून व नागवी तरवार हातांत घेऊन जेव्हां जमीनीवर उतरला, तेव्हां याचे मागून याचे लोकही उतरले. नंतर या सर्वांनी गुढगे टेंकून जी जमीन पाहण्याची यांचे मनांत इतके दिवस इच्छा होती तिचें चुंबन केलें, आणि क्रुसाची मूर्ति उभीकरून तिचे पुढें साष्टांग नमसस्कार घालून, ईश्वराने यांचे जल पर्यटनाचा शेवटपार आनंददायक

केला म्हणून, त्याची हे प्रार्थना करूं लागले. अशा प्रकारचे कृत्यांत पोर्तुगीज लोकांचा नवीन देश शोधून काढल्यावर जो शिष्टाचार करण्याचा सांप्रदाय असे तो सर्व करून, कास्तील आणि लियोना एथील सरकारच्या नावानें त्या देशामध्यें या सर्वांनीं झेंडा लाविला.

स्पेन देशांतील लोक जेव्हां अशा कृत्यांत गुंतले होते, तेव्हां त्या नवीन देशांतील पुष्कळ लोक त्यांचे सभोंवार उभे राहिले, आणि स्पेन देशीय लोक जीं कृत्यें करीत होते, त्यांमध्यें त्यांची कांहीं समजूत न पडून, व त्यापासून परिणाम काय होतील हेंही प्रथमतः लक्षांत न येऊन, तोंडांतून एकही अक्षर न काढितां मोठ्या आश्चर्यानें, त्यां कृत्यां कडेस त्यांनीं टकळी लाविली होती. स्पेनदेशीय लोकांचा वेष, तसाच त्यांचे आंगाचा पांढरेपणा व त्यांच्या दाढ्या, आणि त्यांची हत्यारें, चमत्कारिक, व आश्चर्य होण्याजोगीं दिसलीं. स्पेनदेशीय लोक ज्या मोठ्या गलबतांत बसून समुद्रांतून आले, तीं गलबतें आपले पक्षांचे योगानें पाण्यांतून चालतात, आणि त्यांपासून मेघ गर्जने सारिखा भयंकर शब्द होऊन वीज आणि धूर हीं उत्पन्न होतात, असें या नवीन देशांतील लोकांचे दृष्टीस पडलें; तेणेंकरून त्यांस इतकी भीति उत्पन्न झाली कीं, तीवरून ते स्पेन देशीयलांस उत्तम जातीचे लोक मानूं लागले, आणि असें ठरविलें, कीं हीं सूर्याचीं लेंकरें पृथ्वी पाहाण्याकरितां खालीं उतरलीं आहेत.

Or,

કોલમ્બસે પોતે શોધી કાહાડેલી નવી પૃથ્વી ઉપર સર્વ યુરોપીઅન કરતાં પ્રથમ પગ મુક્યો. તે ઉમદા પોશાક પેહેરીને અને હાથમાં નાગી તરવાર લઈને કિનારે ઉતર્યો. તેના માણસો તેની પાછળ ગયાં અને જે ધરતી જોવાને તેઓ એટલા દિવસ સુધી આતુર હતા તેનું તેઓ સર્વ જણાએ ચુંબન કીધું. ત્યારપછી તેઓએ ત્યાંહાં એક ક્રૂસ ઉભો કીધો, અને તેની આગલ પગે લાગીને તેમની સફરનો એવો સારો પરિણામ થયો તેવિશે ઈશ્વરની સ્તુતિ કીધી. લિઓન અને કાસ્તીલના રાજાને નામે તે દેશ તેઓએ હસ્તગત કીધો, અને એવે પ્રસંગે પોર્તુગીજ લોકો જે ક્રિયા કરતા હતા તેપ્રમાણે આ લોકોએ પણ કીધી.

સ્પાનિઅર્દ લોકો આ ક્રિયા કરતા હતા તેવામાં ત્યાંહાંના ઘણાએક રેહેવાસિઓ તેમની આસપાસ એકઠા થઈને હ્મોટા આશ્ચર્યથી જોવા લાગ્યા;

પણ તેઓ આ ક્રિયા શામાટે કરેછે અને આગળ શું નિપજશે એ વાતથી આ લોક કેવળ અજ્ઞાન હતા. સ્પાનિઅર્દ લોકોનાં પોશાક, તેઓના શરીરનું ગોરાપણું, તેઓની દાઢી અને હથીયારો એ સર્વ ત્યાંહાંના લોકોને ઘણું અજાયબસરખાં દેખાયાં. જે હોટાં યંત્રોએ કરીને સ્પાનિઅર્દ લોકો મહા સમુદ્રઉપર થઇને આવ્યા તે યંત્રો પાંખોથી પાણીઉપર ફરતાં હોય એમ તેઓના દીઠામાં આવ્યાં; અને તેઓ માંહેથી ગડગડાટ જેવો ભયંકર શબ્દ સાંભળીને તથા વિજળીના જેવો પ્રકારા અને ધુમાડો નિકલતાં જોઇને આ અજ્ઞાન લોકોના મનમાં અતિશય ભય ઉત્પન્ન થયું. આ નવા માણુસો સૂર્યના પુત્ર છે અને તેઓ દેવલોકથી ઉતરીને આ પૃથ્વી જોવા આવ્યા છે એવું માનીને તેઓએ તેમને હોટું માન આપ્યું.

6th December.—From 11 to 3.

I. POLITICAL ECONOMY.

Professor SINCLAIR.

1. The source of Capital? Its function? And Mr. Mill's Fundamental Propositions respecting it?

2. Illustrate at some length the principal causes on which Superior Productiveness depends?

3. Mr. Mill divides Commodities with respect to the Difficulty of their Attainment into three classes? State the law of the value of each? Some important consequences arise from the third class?

4. Could you give a more exhaustive division of commodities with respect to the difficulty of their attainment, so as to include the case of extra profits arising from having the exclusive use of processes by which production is increased at a *less* rate of Cost? Such extra profits are essentially similar to Rent?

5. The Method of Investigating Economic Laws is the same as that which must be adopted in a class of the Natural Sciences which labour under a *characteristic difficulty?* And describe the method?

6. Prof. Hancock's general formula for the price of a commodity, so far as it depends on the causes which limit its supply,

you may conveniently express in the *form of an equation?* The number of the terms may be diminished by a rearrangement, so as to furnish (1) Adam Smith's "Component parts" of "the price of the far greater part of commodities," and (2) Mr. Senior's conclusions as to the extent to which the price of a commodity depends on its cost of production?

II. L'ALLEGRO AND IL PENSEROSO.

1. Contrast the arguments of these beautifully descriptive poems; and illustrate your views by quotations from the poems themselves? Dr. Johnson does not seem to have exactly caught the *true* spirit of the *cheerfulness* intended by Milton, and really depicted in L'Allegro?

2. "And every shepherd tells his *tale*
Under the hawthorn in the dale."

"*Tale*" has been erroneously taken by some to signify a "story" in this passage? Dryden employs the term in the same sense as Milton, in his translation of one of Virgil's Bucolics?

3. "Where perhaps some beauty lies,
The *Cynosure* of neighbouring eyes."

An elegant allusion is conveyed in this couplet?

4. "When to the well-trod stage anon,
If Jonson's learned *sock* be on;
Or sweetest Shakspeare, Fancy's child,
Warble his native wood-notes wild."

Which species of Shakspeare's compositions is here celebrated? Origin of this use of the word "sock"? In Il Penseroso, the *supplementary* term is employed in bestowing a glancing panegyric also on Shakspeare?

5. "Or that *starr'd* Ethiop queen that strove
To set her beauty's praise above
The *sea-nymphs*, and their powers offended."

The Classical allusions in this passage? In what part of the heavens are the Constellations situated which bear the names of the mother, daughter, and lover? [How would you find the first point of the sign of Aries by means of the two first?]

6. "But let my due feet never fail
To walk the studious *cloysters pale*,

And love the high-embowed roof,
With antick pillars massy proof,
And *storied* windows richly *dight*,
Casting a dim religious light :
There let the pealing organ blow,
To the full-voiced quire below,
In service high, and *anthems* clear."

Describe the architecture of a Gothic cathedral in illustration of the allusions contained in these exquisite lines? The second line admits of two constructions : punctuate, and explain both?

The present incorrect mode of spelling "anthem" has propagated a false derivation of the word? The origin of the term, and how, accordingly, should it be spelled?

7th December.—From 11 to 3.

CHEMISTRY AND GEOLOGY.

Professor GIRAUD.

1. Explain the relation of the Boiling Point of Water to Atmospheric Pressure, and the use to which this may be applied.

2. What are the proportions in which Oxygen and Hydrogen combine together by weight and volume ; and how may the composition of Water be proved analytically ?

3. What is the difference in chemical composition and in physical properties between Cast and Malleable Iron ; and how is the one converted into the other ?

4. What is Coal ; the Rocks in which it is found ; the Fossils with which it is associated ; and the position of the Carboniferous System in the series of Stratified Rocks ?

5. How are Plutonic distinguished from Volcanic Rocks ? Mention some examples of each kind.

6. What is the meaning of the term Fossil ? What kinds of Fossils are most abundant, and in what way are they especially useful, in Geology ?

7. What is the meaning of the following terms used in Geology, namely *dip, strike, anticlinal axis, and fault ?*

8th December.—From 11 to 2.

MATHEMATICS AND NATURAL PHILOSOPHY.

Acting Professor DADABHAI NAOROJI.

1. Locus of the equation

$$4y^2 - 8xy - 4x^2 - 4y + 28x - 15 = o.$$

2. The Hyperbola is the only curve of the second order which admits of rectilineal Asymptotes.

3. Derive the equation to the Parabola from that to the Hyperbola.

4. Curves of the second order are sections of a Cone.

5. Locus of the intersection of diagonals of rectangles, inscribed in a given triangle.

6. Laws of Fluid Support.

7. The Barometer.

8. Laws of Magnetic Phenomena.

9. Electrical Induction, and the Leyden Jar.

9th December.—From 11 to 2.

MENTAL PHILOSOPHY.

Professor HARKNESS.

1. What is the object of the Essay on the Human Understanding? Point out the chief objections that have been brought against its (1) method; (2) theory of the origin of our ideas; (3) theory of knowledge.

2. How, according to Locke, do we get our ideas of Cause and Effect? State briefly, and compare with the above, Hume's theory of Cause and Effect. How far has the latter been impugned by Kant, and on what grounds?

5. According to Cousin, the process of the Mind, in the acquisition of *simple* and of *complex* ideas, is just the reverse of that assigned by Locke.

4. Cousin takes exception to four statements in the Third Book?

5. The rise of Nominalism and of Realism according to Cousin, and the opposite errors of these schools?

10*th December*.—From 11 to 3.

I. HISTORY.

Professor SINCLAIR.

1. The great subject of all history in the mind of Professor Smyth, and for what reasons? The most successful instance in history of the assertion of these rights? The two great questions which Smyth proposes to the students of this reign, and to which all others may, for the most part, be reduced?

2. Sir William Temple's plan at once to secure the Nation from misgovernment, and protect the Crown against the encroachments of Parliament? Temple's words respecting this Council, and the short pithy sentence of Barillon, which seem to have suggested to Mr. Macaulay his solution of this generally misunderstood project? For many reasons it could not have been a *Cabinet* that was intended?

3. Brief sketch of the internal relations of the Northern European States at the accession of Charles XII.? State the most important consequences of the Battle of Pultawa?

4. The Colonies which France has attempted to found are in general of three sorts? To what causes does Professor Heeren refer the failure of two of these? The third kind prospered in the hands of the French? In some respects the French colonial policy was more liberal than that of other nations?

5. The character of the reign of Louis XIV., as an instance of *purely* monarchical government, affords *one* part of a most important question for the historian's investigation and reflection? The peculiar faults and merits of the characters of the two nations may in general be traced up to what causes, according to Smyth?

6. The Liberty of the Press has three distinct stages before attaining its full development? Even in France how far has it been achieved? With what state does Blackstone seem to be content? Smyth addresses three observations to those who wish to make this important question a subject of their meditation?

II. PHILOLOGY.

1. Of the five stocks of the Indo-European languages, *three* enter into the composition of the English? In what parts of the

British Isles do the *original* languages still exist, and their names? Some *particular* languages of the *other two* stocks especially illustrate the English? *One* stock, however, is so prominently important, that it must form the *basis* of our investigations?

2. The accredited relations of the Jutes, Saxons, and Angles, in reference to their geographical localities as Germans? The accredited details of their different immigrations into Britain? Hence the characteristic differences of these tribes are to be looked for in *what parts* of England respectively? Dr. Latham's general inference with respect to the *epoch* at which the displacement of the original British language began?

3. The general *collective* designation of the great stock of languages of which the Germanic tongues constitute one branch? The name of the *other great* branch, the names of the four dialects comprehended under it, their geographical position [draw a *map*], and the languages which some of them come in contact with at their boundaries?

4. The Teutonic branch falls into three divisions? The name *German* is really foreign to all the Gothic languages: by whom, to whom, and *for what purpose*, was it first applied? The origin of the word *Germani* in the Latin language is a point upon which there are two hypotheses?

5. The languages of the Classical stock? Of these, the Ausonian elements require a special consideration in the illustration of the history of the English language? When was the designation of Anglo-Norman given, and *trace* its relation to the Latin?

6. In fact, from Italy the Latin language was extended over certain countries; in what chronological order, and on what languages respectively, was it engrafted in the several countries? Hence, from the Latin we have (amongst others) four important modern languages? One *essential* cause of the differences which exist among these languages? Dr. Latham classifies them into two divisions?

THIRD YEAR'S STUDENTS.

12th December.—From 11 to 2.

VERNACULAR ESSAY.

Professor HARKNESS.

Subject.—On the Advantages and Pleasures of Knowledge.

13th December.—From 11 to 3½.

I. POLITICAL ECONOMY.

Professor SINCLAIR.

1. The duties of a Government, as enumerated by Dr. Adam Smith, are four in number? Mr. J. S. Mill divides the principles and effects of Government Interference into three parts? And to what general heads does he reduce those "necessary" functions of Government which are of principal importance? Opposite errors prevail on the Continent and in England respecting the *proper limits* of the functions and agency of Governments? And by what *general principle* would Mr. Mill be guided in assigning boundaries to Government interference?

2. Professor Hancock points out an erroneous way of looking upon Government in connexion with Taxation, which is a source of many minor errors? This arises from a mistaken notion of the duties of a Government? Mr. M'Culloch's views respecting the *interests* of a *Government* in *facilitating production* are (1) erroneous in theory, and (2) contradicted by experience? Source of this error?

3. Adam Smith's general Principles of Taxation? For what reason ought Equality to be the rule in all affairs of Government? Mr. Mill's interpretation of "Equality of taxation" is adopted by Professor Heron?

4. The most simple and natural tax, conforming to all Adam Smith's maxims, according to Prof. Hancock? Prof. Heron has expressed the *rationale* of this scheme of taxation in a very scientific manner? Hancock's definition of Income is more extensive than either Mr. Brodie's or Mr. Mill's? Mr. Mill's objections

to this scheme of Taxation? The vital importance, however, of the Income Tax is ably illustrated by Mr. Gladstone in his Budget?

5. Arguments for and against the Funding System, compared with the plan for raising the supplies for a war within a year by increased taxation? The *rise* of the funding system in Great Britain was warranted by political considerations? The greatest error in the management of the financial affairs of the Empire since the Revolution, according to M'Culloch? And it is traced by Hancock partly to what cause? Hancock suggests an ingenious way of reducing the *terms of redemption* of the National Debt, whenever the rate of interest *rose?*

6. "In the enumeration of bad taxes, a conspicuous place must be assigned to law taxes": Mr. Bentham and Mr. Mill have ably exposed some fallacies on this head? On what general economic principles does Hancock argue that it is really the interest of the legal profession that law proceedings be cheapened, by the abolition of law taxes?

II. HAMLET; BACON'S ESSAYS.

1. *Oph.* "No more but so?
Laer. Think it no more:
For Nature, *crescent*, does not grow alone
In *thews*, and bulk; but, as this *temple waxes*
The inward *service of the mind and soul*
Grows wide withal."

The general meaning of these lines? The Latin word "crescent" is *identical* with a certain English word? And explain the *letter-changes?*

2. The "few precepts" of Polonius to his son, Laertes, are worthy of being "charactered in thy memory"? Mr. M'Culloch could not have better expressed the generally bad economic effects of "borrowing"? Nor could Bishop Butler have been more fully persuaded of the harmony that exists between enlightened Self-love and the General welfare?

3. "To be, or not to be, that is the question:—
Whether 'tis nobler in the mind, to suffer
The *stings* and *arrows* of outrageous fortune;

Or to *take arms* against a *sea of troubles,*
And, by opposing, end them ? " &c.

State the successive trains of thought in the soliloquy ? The third line has a Various Reading ? Which Reading do you prefer, and why ? Your application of the " sea of troubles" may depend on the views you adopt respecting the third line ?

4. " The poet that beautified the sect, that was otherwise inferior to the rest, saith yet excellently well :—' It is a pleasure to stand upon the shore, and see ships tossed upon the sea ; * * * but no pleasure is comparable to the standing upon the vantage ground of *truth,* a hill not to be commanded, and where the air is always clear and serene ; * * *. Certainly it is heaven on earth to have a man's mind move in charity, rest in providence, and turn on the poles of truth."

In what respects were the Epicureans inferior to the Stoics, or to the Peripatetics ? The name of " the poet" ?

One of Pascal's Thoughts contains a profound and elegant reflection whether Truth be the object for the *pious* mind to *rest in ?* Aristotle, in dissenting from his master Plato, on his theory of Ideas, apologizes in language at once full of gratitude, and breathing the genuine spirit of a philosopher ?

5. " God never wrought miracles to convince Atheism." The tendency of a " little philosophy" according to Bacon, and the remedy ? An analogous couplet by Pope on degrees of " learning" ?

6. " Studies serve for delight, for ornament, and for ability." Their " chief *use*" for these severally ? And *abuse ?* " Read," for what end ? Contrast the effects of " reading," " conference," and " writing" ? " Every defect of the mind may have a special receipt" ?

14*th December*.—From 11 to 2.

CHEMISTRY AND GEOLOGY.

Professor GIRAUD.

1. What is Nitre, and how is it procured from natural and from artificial sources ?

2. How is Chlorine Gas procured; what are its leading properties; to what useful purposes is it applied, and how?

3. State the law of Equivalent Composition, and illustrate it by examples.

4. Into what Classes are Rocks divided by Geologists, both with reference to their composition and their origin?

5. State what is known of the nature and origin of Metamorphic Rocks, and mention the names of some of them.

6. Give in a vertical column the names of the Stratified Rocks, in the order of their succession.

7. What indications do Fossils afford of the nature and origin of the strata in which they are found?

15th December.—From 11 to 2.

MATHEMATICS.

Acting Professor DADABHAI NAOROJI.

1. The whole length of the cycloid is four times the diameter of the generating circle?

2. The *catenary* is a rectifiable curve?

3. A cord, whose length is 14 feet, is fastened to two hooks, at the distance of 12 feet from each other. At a point of the cord, distant 9 feet from one of the hooks, is fastened, by a knot, another cord, which is stretched by a weight of 60 lbs. at an angle of 70° with the line joining the two hooks. Determine the pressure on each of the hooks?

4. The Equations of equilibrium of a solid body acted upon by forces in the same plane?

5. What will be the height of the greatest segment that can be cut off a prolate spheroid, whose longer axis is double the shorter, by a plane perpendicular to the longer axis, so that it may be unable to rest upon any point of its convex surface except the vertex?

6. Determine the dimensions of the strongest rectangular beam that can be cut out of a given cylindrical tree?

7. A body falls from rest down an inclined plane; compare the times of describing the first and last halves of it?

16*th December*.—From 11 to 2.

MORAL PHILOSOPHY.

Professor HARKNESS.

1. Show by analogy the *probability* of a future state of reward and punishment?

2. How does Butler show that the present world, considered as a state of moral discipline, is peculiarly fitted to form and cherish in us *habits* of virtue, as distinguished from merely isolated *acts*; and to what extent does he think this holds good?

3. Why may the prevalence of the appetites or passions over the principle of Conscience be considered as a violation of the *constitution* of Man?

4. "Moral obligations would remain certain, though it were not certain what would, upon the whole, be the consequences of violating them?"

5. Upon the supposition that Man has the rule of right within himself, how do you answer the question, "What obligations is he under to attend to and follow it?"

17*th December*.—From 11 to 3.

I. ETHICS.

Professor SINCLAIR.

1. Our Active and Moral Powers may be arranged in five classes? And by what characters are they severally distinguished? Enumerate the Appetites, the most important of the Desires and Affections, and show that none of them is resolvable into Self-love? Show also that Sense of Duty, and Enlightened Regard to one's Interest, though they both lead to the same course of conduct, are yet quite distinct *in themselves*.

2. The *most important* question in Ethics, according to Stewart? Bishop Butler has given the substance of the whole controversy in his "abstract truths" and "matters of fact"; and his *illustration* from Geometry sets the distinct *meaning* of these terms in the clearest point of view? Consistently with their *Metaphysical* Systems, neither Locke nor Hume could admit "abstract truths"?

3. An Examination of the Principles of Natural Religion is a most important duty, for several reasons? By aid of what fundamental principles of our constitution does Stewart derive the Existence and some of the Attributes of God? Clarke's *Demonstration of the Being of God* is more carefully given by *Butler* than by Stewart? Dr. Clarke [The Answer to a Sixth Letter] has *himself* most clearly stated for *what kind* of Minds the *à priori* Proof is of use; and has shown by an excellent illustration why this mode of argument should not be pressed on the bulk of mankind? However, "it has been often proved with *accumulated* evidence"?

4. *Whence* only can the Moral attributes of God be most *safely* derived? We are thus naturally led to consider Goodness as the supreme attribute of God: state the process? All *Objections* against the goodness of God can be satisfactorily answered?

5. By means of an *Ethical Principle* you can *prove* that the *Virtue* of the man who believes in God, and yet does *not* cultivate an habitual LOVE of *Him*, is *inconsistent* with itself? This principle, too, is a very important *test* with Aristotle? And by it you have an additional elucidation of Butler's words—"It is indeed ridiculous to assert, that *self-denial* is ESSENTIAL to *virtue* and *piety*"?

II. PHILOLOGY.

1. State fully the Stocks of languages comprehended under the term Indo-European, and their *principal subdivisions?* The Celtic Stock must have become detached from the others at an *extraordinarily early* period: upon what *philological* peculiarity is this inference based?

2. Trace distinctly the different elements of the Gothic and Classical stocks which have contributed to the formation of the present English; and state the epochs at which most probably the different accretions commenced?

3. "Frontispiece," "sovereign," "lanthorn" (old orthography), "lutestring," *suggest false* etymologies: what are the words from which they are really derived?

4. The feminine termination *-ess* in "shepherdess," &c. of

Gothic or Classical origin? Root of "vixen," and derive it? And the root of "queen" may be easily discerned by the aid of the German?

5. "Brethren," "peasen," "chickens," exemplify three different *double* forms of the *plural?* An erroneous notion respecting the *'s* in the genitive [*e. g.* father*'s*] is confuted by comparative philology? The Sanscrit, Greek, and Latin for "of a foot"? In what *cases* really are "him," "them," "whom," and the antiquated "whilom"? The *only* unequivocal *objectives* in English?

6. Throughout the Indo-European languages, the *interrogative* or *relative* idea and the *demonstrative* idea are expressed by what classes of letters respectively? Examples from Indian and European languages? "Which" is *not* the *neuter* of "who": its *elements* are better preserved in a *Scotch* word?

7. That "goose" had originally an *n*, may be proved from the Sanscrit, Vernacular and Classical languages, and from an English *derived* word? The *ejection* of *n* is usually *compensated* in a certain manner, which may be exemplified by the Prakrit forms of "tooth," "hand," and several other words?

APPENDIX D

SELECTIONS FROM *VIVA VOCE* QUESTIONS.

By Professor SINCLAIR.

SECOND YEAR'S STUDENTS.

6th December.—From 3–20 to 5.

POLITICAL ECONOMY.

1. There are two great classes of Laws, which the Political Economist, as such, does not investigate, but assumes, by means of which he may trace the secondary or derivative laws whereby the production of wealth is determined?

2. The primary requisites of Production?

3. The function of Labour, as defined by Lord Bacon, and adopted by Mr. Mill?

4. Natural objects really perform two functions in the production of a Material Commodity?

5. Mill illustrates the unimportance of the question whether nature contributes more to the efficacy of labour in some occupations or in others.

6. However, this question had its origin in a fundamental misconception entertained by some Economists on an important question in Political Economy?

7. What is the real doctrine of Rent?

8. To estimate the sum of the labour of which any given commodity is the result, would be far from a simple operation?

9. However, without committing any very sensible error, we may generally simplify the investigation? [This expedient is adopted by mathematicians in a certain class of questions?]

10. Mr. Mill mentions six modes in which labour is indirectly instrumental to production ?

11. Mr. Mill's distinction, for economic purposes, of materials and tools ?

12. In Mr. Mill's fourth kind of indirect labour (rendering the things accessible), exemplify the extension he gives to his language ?

13. In a national point of view, the labour of the savant or speculative thinker is as much a part of production in the narrowest sense as that of the inventor of a practical art: exemplify this ?

14. What is the object of production, according to M. Say ? And what according to Mr. Mill ?

15. One of Mr. Mill's fundamental propositions on Capital affords the explanation (Dr. Chalmers') of the great rapidity with which nations sometimes recover from a state of devastation ?

16. In times of war, it is not so wonderful that the productive powers of a country often continue undiminished ? Which class, however, generally suffers ?

17. Demand for commodities and demand for labour are by no means identical ?

18. The distinction between Circulating Capital and Fixed Capital, adopted by Mr. Mill ?

19. The most permanent of all kinds of Fixed Capital ?

20. The use of the Capital thus sunk depends on what class of laws for its remuneration ?

21. The effect of converting a portion of Circulating Capital into Fixed Capital might be beneficial to the Capitalists, but at the same time prejudicial to the gross produce of the country, at least temporarily so ?

22. However, the *ultimate* effect of investing Capital in this manner is, on the contrary, a vast increase in the gross produce of the country: how does this come about ?

23. The principal industrial excellence of the British people consists in possessing a certain mental quality ?

24. Mr. Escher, of Zurich, says that the uneducated English workman is " in conduct the most disorderly, debauched, and unruly, and least respectable and trustworthy of any nation

whatsoever whom we have employed." Of what great *blessing* of the *British* Constitution did Bishop Butler foresee such might be the *lamentable consequences*, and what was the effectual *remedy* he recommended?

25. Wakefield's division of co-operation of Labour? Illustrate them.

26. The definition of Political Economy which best indicates its limits, according to Professor Hancock?

27. The most important circumstance which is to be considered in every exchange?

28. The value of different articles of wealth is observed to be subject to variations both as to *time* and as to *place?* Give instances exemplifying the different cases.

29. Professor Hancock substitutes "observations into variations in price" for "observations into variations in value" in economic investigations, for two important reasons?

30. A third reason might be supplied, from a characteristic quality of the precious metals?

31. Ambiguities in the term "value," as pointed out by Mill? An additional one mentioned by Hancock?

32. Hancock supplies three reasons why such ambiguities should be avoided?

33. The first important result which has been ascertained by systematic observations of prices?

34. Intrinsic variations in the price of any commodity arises from one of two causes?

35. These two causes operate separately?

36. Measure of the degree in which a commodity is *desired?*

37. The desirability of commodities in general increases very rapidly as the prices fall: a familiar example?

38. Intrinsic variations in prices for short periods, and those for long periods, are almost entirely due to what causes respectively?

39. Of the three instruments of production, the act of employing Capital have been variously designated by Political Economists?

40. The investigations of the causes of the variations of the price of labour, of that of "savingness" or "abstinence," and of

that of the assistance of natural agents, resolves itself into three important parts of Political Economy?

41. Again, the investigation of these three theories employs itself about two classes of causes, as affecting their prices?

42. The various definitions of Political Economy which have been reviewed by Professor Green?

43. Saleable services are of two kinds? Exemplify them.

44. Comprehensive definition of the term Capital?

45. Three points of agreement between Mental Capital and Material Capital?

46. Point of their disagreement?

47. Hence the consideration of Mental Capital must be included in some discussions, and excluded from others?

48. The Capitalist of a factory is generally remunerated for three kinds of services?

49. In the present state of trade, the Indian Capitalist is generally remunerated for only two of these?

50. The principle of free competition is carried out, as a matter of fact, most completely in remunerating what kind of services, and most in what kind of market?

10th December.—From 3–10 to 5.

HISTORY.

1. The politics of the age of Louis XIV. were very much influenced by the action of a certain principle?

2. The three great questions according to Heeren, which from their nature form the foundation of Political Economy, and which should be known by statesmen?

3. According to Heeren, a nation's means are most correctly placed in what kind of wealth?

4. That the increase of *money* was regarded by *Governments* as the chief object of Political Economy, is not wonderful?

5. In consequence of this (the "Mercantile" system), what were considered the primary sources of wealth?

6. Hence it follows that the Maritime powers should obtain a greater weight in the political balance?

7. The effects which the application of the Mercantile

system had upon the mutual relations of the states, both in *peace* and in *war*, were highly injurious ?

8. The Military was in a peculiar manner combined with the Mercantile character of this age ; why ?

9. What are the advantages of separating the Military class ?

10. Upon what was the *precedence* of France among the nations of Europe at this period chiefly founded ?

11. That the *peaceful* conquests of civilization and language are more imperishable than those of arms, is correctly accounted for by Professor Heeren ?

12. To what causes is the debility of Spain during this period to be attributed ?

13. England was destitute of any stable character at this time?

14. The Republic of the United Netherlands, powerful on the ocean, was weak on land ; what policy required this weakening of the land force ?

15. During this period the Commercial regulations of the English and the Dutch contributed towards fomenting mutual jealousy ?

16. The favourite idea of Louis XIV., which had also been that of Richelieu ?

17. This must have been a very inviting project to such a man as Louis ?

18. Meanwhile war broke out between England and the Republic : its cause ?

19. Parties engaged in the war ?

20. The weakness of the Dutch by *land* was strikingly illustrated in a contemporaneous war ?

21. Terms of the Peace at Breda ?

22. For what purpose was the Triple Alliance formed, and by whom, and in what year ?

23. Its influence on Louis XIV. ?

24. Terms of the Peace at Aix-la-Chapelle ?

25. As the alliance so restrained Louis, of course he attempts to procure its dissolution : this was not a difficult matter ?

26. A *secret* alliance was formed between France and England at this time, with what ends in view ?

27. The effect of this on Sir William Temple ?

28. The Republic did not not sink even in the fall of DeWit ?

29. Contrast the missions of the two Princes of Orange ?

30. Amsterdam preserved by an heroic act, and in what year ?

31. A Revolution took place at the Hague ?

32. In the reign of Louis XIV. the French *influence* increased in a far greater degree than the French power : even the expulsion of the Huguenots contributed thereto ?

33. Origin of Jansenism ; the probable date ?

34. In 1665 Jansenism became of practical importance among the clergy ?

35. The year in which William III. was raised to the throne of England ?

36. Two objects of the desire of Englishmen were secured by this Revolution ?

37. The great advantages of the Constitution did not consist in an equilibrium of powers effected by artificial means, but in what causes ?

38. As mediators between the King and the Parliament, the weight of the Ministers was necessarily increased: on what, however, did their *efficiency* afterwards depend ?

39. The public opposition secured them from secret cabals, though unity amongst themselves was naturally requisite : for this, how was provision made ?

40. Professor Heeren says : " There could not therefore be, in any of the leading States of Europe, so much political life in the nation itself as in this country ; and certainly not without reason was Great Britain, for a century, the object of admiration as the model of a constitutional monarchy ; though men *sought in forms* what lay *much deeper*." What does Heeren here seem to hint at (Guizot will aid you in the solution) ?

41. Foreign powers had ample reason to use circumspection in their relations with England, from the nature of the Government ?

42. To all reasoners at the time, the ultimate success of the English Revolution must have seemed doubtful ?

43. There were some circumstances which operated most happily to assist the new Government ?

44. To whom are we indebted, in the greatest degree, for so happy an issue of this doubtful experiment?

45. Though William was unsuccessful in securing the proper benefit of the talents of the Tories and Whigs, yet he was successful in the main: however, his *meritorious exertions* will ever place him high in the scale of esteem, when weighed amongst the greatest of his fellow mortals?

46. In the first Parliament in William's reign the Whigs effected two good works?

47. The principal questions which occurred in William's reign?

48. The nature of the Place Bill, and its history?

49. History of the Triennial Bill? Upon what power was the Triennial Bill really an infringement?

50. The conduct of Charles II. seemed to render such a provision necessary?

51. The reign of William is also remarkable for the views entertained respecting a standing army?

52. The least objectionable dispensers of the *penalties* of the law, in cases where the press transgresses proper limits?

53. Why are *Judges* objectionable *at all?*

54. The liberty of the press is a faithful index of the public mind, and of the public happiness?

55. Who were privy to the first Treaty Charles II. made with Louis, and the terms of this Treaty?

56. A second Treaty was then formed: how did it differ from the first?

57. The reasonings on which Charles and the French ambassadors proceeded?

58. In the King's "Declaration of indulgence to Non-conformists," he made use of some expressions which were hardly constitutional?

59. The King's words were, however, commented upon?

60. The King and the Commons are now at issue; he applies to the House of Lords: what part do they take?

61. What reasons may have induced Lord Shaftesbury to declare that he submitted his reason to the "House of Commons, so loyal and affectionate"?

62. Some remarkable words made use of by the King,

which so much alarmed Temple that he "went to the bottom of the matter," and informed the King that two things were impossible in England?

63. Temple had heard a few words at Brussels from M. Gourville, which he repeated to the King: what effect had they?

64. *Macaulay* has clearly stated on what the *historic importance* of an event depends, and has furnished illustrations?

65. His further illustration from the History of Greece?

66. In like manner Miss Osborne's letters to Temple afford to the philosophic eye information on some most important human interests?

67. Temple deserves the highest praise for the celerity and address with which he effected the Triple Alliance; state the interview with DeWit, and that with the Swedish Minister?

68. The language in which the Dutch Commissioners and Temple expressed their mutual congratulations?

69. Why was Sweden taken into the Alliance?

70. Dr. Lingard has very much undervalued the importance of the Triple Alliance?

71. Mr. Macaulay fully proves that both the *foreign* and the *domestic* policy of the measure deserve all praise?

72. Temple had abundant proofs of the estimation in which he was held, on his way to Aix-la-Chapelle?

73. Temple's situation at the Hague was extremely delicate?

74. The notion of Sir William Temple's kind of miniature Parliament was probably suggested by what he had seen elsewhere?

75. The Revolution, however, put an end in a very different way to the long contest between the King and Parliament?

76. Though France, under Louis XIV., possessed a grandeur and weight in the policy of Europe, still she was totally dormant in respect to an amelioration of the most important kind?

77. During this period, the public disturbances in England, and the religious interests in every part of the Continent, except in France, had reference to one common idea?

78. Richelieu's great objects?

79. His great merit and greater faults?

80. Richelieu's aim in crushing the Huguenots?

81. To what extent could it be said that Richelieu contributed to the happiness of France?

82. Under Richelieu's successor, Mazarin, the French nation thought not of its best interests? England forms a noble contrast?

83. Smyth's critique on the reading of private memoirs *towards forming* a historian?

84. The great praise of Voltaire, as a *historian?*

85. In writing his "Age of Louis XIV." he had every advantage?

86. The constant merit of Voltaire's style at the same time renders his *historical* writings, as such, less to be depended on?

87. The great European power which could have best been opposed to Louis, to preserve the balance of power?

88. Considering the views on legislation which were entertained even by Colbert at this time, our appreciation of Fenelon's enlightenment is greatly increased?

89. To acquire a proper estimate of Louis' character, it should be viewed under three different relations?

90. Louis' prevailing passion?

91. Louis' memorable death-bed words to his son?

92. On the most sober reflection, we must pronounce Louis decidedly a *bad man?*

93. As a King, what are his praises?

THIRD YEAR'S STUDENTS.

13th December.—From 3½ to 5.

POLITICAL ECONOMY.

1. When Mr. Mill divides the functions of Government into *necessary* and *optional*, what does he mean by the latter term?

2. Even the most jealous of State-interference never have objected to Government assuming the function of coining money, yet upon what principle is it done?

3. Though Mr. Mill objects to the "graduated Property Tax," yet it seems to him to possess a portion of truth?

4. The limit recommended by Mr. Bentham, and on what grounds?

5. The Income Tax, as arranged in 1853 ?

6. Also what prospective modifications were introduced ?

7. According to Mr. Gladstone, the Income Tax may expire in 1860, if thought desirable ?

8. The avowed grounds upon which *l'impôt progressif* has been advocated ?

9. These are very unsound views ?

10. What kinds of fortune would Mr. Mill put under limitation ?

11. When Mr. Mill says that the principle of equality of taxation, justly interpreted, requires that a person who has no means of providing for old age, and for those in whom he is interested, except by saving from income, should have the tax remitted on all that part which is really applied to that purpose, —he throws out a *practical* suggestion *for the case of old age ?*

12. Mr. Mill gives satisfactory explicit reasons why the labouring classes should not be taxed ?

13. Making the tax fall on profits is doubly objectionable ?

14. The three principles which are necessary to make an Income Tax consistent with justice, according to Mr. Mill ?

15. The Rent of a house consists of two parts, and how is the amount of each of these determined ?

16. Taxes on commodities are of three kinds ?

17. The economic effect of such taxes ?

18. If a tax were imposed on all commodities, proportional to their value, Mr. McCulloch has pointed out a *disturbance of values* which would ensue ? Explain the cause of this ?

19. Illustrate this by a case ?

20. To equalize the expectation of profit, there will be a change in the values of a certain class of commodities ?

21. When taxes are first laid on, the effect which a tax on agricultural produce will have on rents depends on what it affects : if it be an *ad valorem* tax, its effect ?

22. Why did you say " the *Corn*-rent will be lowered" ?

23. The tithe, then, falls on whom ?

24. Incidence of a tax proportional to the rent ?

25. Effect of a fixed tax of so much per cultivated acre ?

26. Custom duties on the produce of land, unless countervailed by excise duties on home production, are, in a peculiar degree, a very wasteful manner, or unjust manner, of raising a revenue?

27. The bad effects of discriminating duties in a mundane point of view?

28. All taxes must be condemned which throw obstacles in the way of the sale of land?

29. The worst way of meeting the expenses of a war, and why?

30. There are circumstances under which the *Loan* system is free from this objection?

31. The policy of hoarding treasure in times of peace against times of war, recommended by Hume, cannot be advocated on economic principles?

32. The Funding system is essentially delusive? Mr. McCulloch's illustration?

33. A social advantage would arise if nations adopted the system of raising the funds within the year?

34. The amount of the annual burden which an error in the Funding system has entailed on Great Britain?

35. The usual way of diminishing the National Debt?

36. Hancock's proposed method of taking advantage of a rise of interest, and for what purpose?

37. Amount of British Revenue for 1852-53?

38. Expenditure?

39. The additional sum voted for the purposes of Education?

40. From Customs and Excise respectively, the amount of anticipated revenue for 1853-54?

41. From Stamps, Income Tax, and Post Office?

42. From this year's modification in the Income Tax, increase expected?

43. This implies how large a deduction for Life Insurances?

44. What changes in the scale of consanguinity have been made with reference to Legacy Duties?

45. Arguments for abolishing the Soap Duty?

46. Another important tax, which Sir Robert Peel abolished?

47. How much will the Treasury lose by the abolition of the Soap Duty?

48. Changes in the Stamp Duty ?

49. In what manner is the reduction in the Tea Duty to be carried out ?

50. The loss which will be thus entailed ?

51. The advantages of taxation on Succession (Mr. Brodie) ?

52. The best way of providing against Absenteeism from land, on the principles of Political Economy ?

53. Mr. Gladstone's changes in the Legacy Duty ?

54. The principal objections against an Income Tax ?

55. Would a *thorough-going* Income Tax be more or less favourable to the labouring class than the mode in which they are at present taxed ?

56. Compensation enters into the sale of commodities in a way it does not enter into the dispensing of security by Government ?

57. Her great National Debt is really no reason why England should not be able to compete with foreigners ?

58. If the taxation of Great Britain be excessive, it is to be remedied in one or more of three ways ?

59. M. Say certainly errs when he says that *"le meilleur des tous les impôts est le plus petit"* ? Illustrate this suicidal scheme ?

60. The real test of the burden of a tax ?

61. The only case in which, on mere principles of Political Economy, protecting duties can be defensible, according to Mr. Mill ?

62. However, even this is not the best method of interfering for the purpose of encouraging any new undertaking ?

63. Professor Hancock enumerates the advantages of the method of bestowing direct pecuniary grants out of the General Taxes ?

64. Why has the Income Tax not been more generally adopted ?

65. Under a *perfect* Income Tax, it is erroneous to say that a professional income of £1000 a year has to pay as much as an income of £1000 a year from inherited personal property ?

66. The perfect Income Tax does complete justice in respect

to the vexed question of imposing different scales of taxation on Rent and Profit?

67. Professor Hancock objects to the *principle* that Taxation should encroach on the luxuries, and never on the necessaries of life?

68. Hancock objects, on economic grounds, to Mr. Mill's statement "that every imperfection in the law, in proportion as it is burdensome to the community, brings gain to the lawyer"?

17*th December*.—From 3 to 4½.

ETHICS.

1. In Moral discourse, the strict meaning of the term Action?

2. A beautiful provision for a communication among mankind of their intellectual attainments is made in the connection which exists between some of our Desires?

3. Some principles of our nature, though not selfish, are yet immediately subservient to the interests of the individual; and some, though not benevolent, immediately serve the interests of our fellows?

4. The idea of Power is in some degree the foundation of the pleasure of Virtuous Conduct?

5. There is a peculiar kind of benevolent affections, on which the best Moralists, ancient and modern, love to dwell?

6. The principal charm of tragedy, and of every other species of pathetic composition, is referrible to what source?

7. The final cause of the agreeableness of the emotions which accompany the exercise of our benevolent affections?

8. Still these affections have nothing selfish in their origin?

9. Whence, then, the growth of the malevolent affections, according to Stewart?

10. Resentment has been distinguished into two kinds by Butler?

11. The object and end of these severally?

12. Hence, we might to a great degree deduce the laws of Morality even from such a principle as Resentment?

13. The constitution of man essentially differs from that of the brutes?

14. The fact that man is able to form a plan of conduct for the attainment of his favourite objects implies a kind of power of the highest importance?

15. A *systematical* steadiness in the pursuit of a particular end is attended with three advantages?

16. Our reason also lays out for us a particular choice of pursuits, which was much insisted upon by the Epicureans?

17. The term Self-love suggests a *false analogy*, and often causes a *confusion?*

18. Selfishness is essentially different from Self-love?

19. The attempt to resolve all Virtue into Prudence was far from being unnatural?

20. A common error among licentious moralists, when treating the question of the reality of moral distinctions?

21. When a moral action comes under our consideration, we are conscious of three different states of mind?

22. Hobbes's account of our approval of virtuous actions, and of actions beneficial to Society?

23. Dr. Cudworth's refutation of Hobbes? Cudworth's origin of our ideas of Right and Wrong?

24. A fundamental omission in Mr. Locke's account of the origin of our ideas led him into some dangerous opinions concerning the nature of moral distinctions, the omission: and the opinions referred to?

25. Dr. Samuel Clarke's and Dr. Wollaston's definitions of Virtue?

26. These definitions owed their origin, in a great measure, to a doctrine of Locke's?

27. Dr. Hutcheson's account of the origin of our moral ideas?

28. From this doctrine various sceptical opinions have been deduced by later writers, in what manner?

29. But Hutcheson's philosophy does not necessarily lead to any such scepticism: by what kind of ideas, then, should he have illustrated our perception of Right and Wrong?

30. Butler has stated two ways in which the subject of Morals may be treated, and has largely employed one of them?

31. In our perception of Merit and Demerit, a provision is made, *before* the establishment of positive laws, for the good of Society?

32. Our perception of merit and demerit in ourselves contains an important truth of Natural Religion?

33. The common notion of the vulgar that good or bad fortune should in every instance follow good or bad actions, strikingly reveals a natural connection between certain ideas?

34. From a wide induction the philosopher does not expect such retributive justice in all cases; why?

35. It is absurd to *deliberate why* we are bound to practise Virtue?

36. Hence, Butler has clearly shown that an ignorance of future punishment for vice is no excuse?

37. The moral faculty, considered as an active power of the mind, essentially differs from all others?

38. A signal defect in Lord Shaftesbury's Moral Philosophy, pointed out by Butler?

39. Smith's error in endeavouring to explain all the phenomena of moral qualities from the principle of sympathy?

40. Dr. Cudworth traces the scepticism of his time to what speculative opinion?

41. Though the modes of proving the existence of God are commonly distinguished into the *à posteriori* and the *à priori*, yet Cousin shows how either involves some principles of the other?

42. What class of attributes renders God the proper object of religious worship?

43. Whence Moral Evil, according to Dr. Samuel Clarke and Stewart?

44. Thus the question of the permission of Moral Evil is reduced to another?

45. To the latter question, a sufficient reply has been suggested by several Ethical writers?

46. On this supposition, even the *sufferings* which result from Vice are no less instances of the *goodness* of God, than the happiness which proceeds from Virtue?

47. The highest excellence which not only our nature, but that of all intelligent beings whatever, can possess or attain to?

48. Aristotle's criterion of the virtuous man?

49. The Epicurean Chief Good?

50. The Stoical?

51. The Peripatetic?

52. The Stoical System was peculiarly calculated to encourage the Social Virtues?

53. Ambiguity in the words Right and Wrong?

54. It has been erroneously supposed by some moralists, that Benevolence is the only immediate object of Moral approbation?

55. Even though Benevolence were the *ultimate* end for which the Deity enjoined on his creatures the duties of Veracity and Justice, still these latter are also indispensable laws to *us?*

56. A most important distinction must be observed with reference to the Benevolence which is an object of Moral approbation?

57. To call the affections themselves virtuous or vicious is not strictly correct?

58. An habitual disposition to deceit is an infallible symptom of some more remote evil?

59. And hence the peculiar beauty of openness and candour?

60. Notwithstanding the seemingly *promiscuous* distribution of happiness and misery in the world, still the *general laws* by which it is governed have *definite* MORAL ends in view?

APPENDIX E.

SELECTED ANSWERS.

LOGIC.

First Year's Students.

1. An argument in which the three propositions are stated at full length, and in their natural order, and in which the validity of the conclusion is apparent from the mere form of the expression, without regard to the sense of the terms, so that if some unmeaning arbitrary symbols, such as the letters of the alphabet, be substituted for the terms, the validity of the conclusion is not the less evident, is called a syllogism.

Every valid syllogism must fulfil the following six rules:—

1*st.*—A proposition must have three, and only three terms.

2*nd.*—It must have three, and but three, propositions.

3*rd.*—The middle term must be only one, and must therefore be unequivocal, and must be distributed at least in one of the premises.

4*th.*—No term to be distributed in the conclusion which was undistributed in the premises, or [in other words] there should be no illicit process.

5*th.*—One at least of the premises must be affirmative; for if both were negative, the middle term would not have been pronounced to agree with each of the terms of the conclusion, or to agree with one and disagree with the other, but to disagree with both; and thence nothing could be inferred, for to say no x is y, z is not x, does not allow us to compare z and y together.

6th.—If one of the premises be negative, the conclusion would be negative, for the middle term does not agree with one of the terms of the conclusion in the negative premise, and agrees with the other in the affirmative premise ; therefore by the 2nd Canon the terms of the conclusion are pronounced to disagree with each other, and therefore the conclusion must be negative.

2. The rule respecting the distribution or the non-distribution of the predicate, in affirmative or negative propositions, is that the predicate of an affirmative proposition is undistributed, and that of the negative distributed. The reason of the rule is evident from the following illustration. For instance, when we take an affirmative proposition like this. Iron is metal—the term metal, which is predicated of the term iron, is of wider extension than the term iron, and therefore stands in this proposition for a part of the things to which it is applicable, and is therefore undistributed. On the contrary, the predicate of a negative proposition is distributed. For example—No liar is deserving of trust. Now in this proposition the whole of the predicate, deserving of trust, is denied of the subject—liar, and is therefore distributed. Now this being negative proposition, we infer that the predicate of a negative proposition is always distributed.

SHRIDHAR VITHUL.

3. In some cases we put the conclusion before the premises, and in such cases we name the conjunctions that join the former to the latter causal, such as "because," &c. ; and when we put the conclusion after the premises, we call the conjunctions "illative," as "therefore," "consequently," &c. These conjunctions are used to denote the connection between the conclusion and the premises as well as that between a cause and an effect ; thus when we say that the ground is rich because the trees on it are flourishing, the conjunction denotes the relation between the premises, and the conclusion ; but when we say that the trees are flourishing because the soil is rich, it denotes the relation between cause and its effect. And thus men are misled in using these conjunctions in these two different senses, because the fact, the trees are flourishing, is not the cause of the soil being rich, but is the cause of my believing it to be so, and therefore it is called

a reason for the purpose of distinguishing it from a cause which is essential to the existence of a thing.

SHREECRUSTNA NARAYAN.

4. Enthymeme is a syllogism with one of the premises suppressed. When an argument is stated in this form, the objections will generally be against the assertion itself or against its force as an argument. Thus when any one says that the world exhibits marks of design, therefore it must have an intelligent author, the objections of the opponent will be either against the assertion itself that the world exhibits marks of design, or that it follows from thence that it had an intelligent author. In the one case the expressed premise is denied, and in the other the suppressed premise, viz. everything that exhibits marks, &c. has an intelligent maker. For if both be admitted, the conclusion legitimately drawn from them should be admitted.

SHIVSHANKAR GOVINDRAM.

5. The two propositions, all equilateral triangles are equiangular, and all equiangular triangles are equilateral, require two distinct proofs. For we cannot infer from the mere form of the proposition, all equilateral triangles are equiangular, that all equiangular triangles are equilateral, for the proposition being an affirmative one, its predicate is undistributed, which will be distributed in the converse, and so the whole of the term equiangular will be compared with the term equilateral, which was but partly compared with it in the original proposition. Therefore, though the terms may be convertible, that is of equal extent, we cannor infer from the mere form of the expression the truth of the converse, and for this reason the two propositions require two distinct proofs.

SHRIDHAR VITHUL.

MENTAL PHILOSOPHY.

SECOND YEAR'S STUDENTS.

1. The object of the Essay on the Human Understanding may be known from what Locke says in his introduction to the Essay. He says that once in a company of his friends, a

difficult point came at issue in their arguments on a certain subject; and it happened that none of the company could find his way through it. Upon this Locke resolved to examine what power our faculties were endowed with [with] respect to the acquisition of knowledge; whether all knowledge was possible to be acquired by man. Thus the object of the Essay seems to be to ascertain how far our knowledge could reach, and what things would be excluded from it. The chief objections brought against Locke's method are:—1st.—That he begins with the *origin* of our ideas, instead of first inquiring [into] the nature of these ideas as they are in our minds; as they are in the minds of all men. The right method, according to Cousin, is to know the facts as they are, and then by hypothesis to seek for their origin. 2nd.—That Locke in trying to find out the origin of our ideas makes his observations upon the *infants, idiots,* and *savages*: in the case of infants we can do nothing more than draw our conclusions from the doubtful data furnished by their signs; while in the case of savages we must rely on the testimony of travellers.

The origin which Locke assigns to all our ideas is *experience*—that is sensation and reflection. Cousin objects to this as being the only source of our ideas; and examines whether we have no ideas which are not derived from the origin assigned by Locke; as an example he takes the idea of *space*. Now according to Locke this idea comes from sensation, or to be more minute, from *sight* and *touch*; but in the chapter where he (Locke) treats of the ideas derived from the sight and touch, he says that the only idea which these senses furnish is solidity (body). From these two premises Cousin draws the legitimate conclusion that for Locke the idea of body and the idea of space are the same thing; next he compares this idea of space as given by Locke with the idea of space as it exists in the minds of all men, and finds that the two ideas of body and of space disagree with each other in three important particulars: I.—That the idea of body is contingent while that of space is necessary; II.—The idea of body implies limits, while the other implies an absence of all limits. III.—That the idea of body is a sensible representation, while that of space is a rational conception. On these three grounds he (Cousin) affirms that these

two ideas are not the same; and therefore the theory of Locke as to the origin of our ideas cannot give the idea of space as it is in the human mind. Next he distinguishes between the two opposite orders of our cognitions, the *logical* and the *chronological;* two ideas being given, that without the supposition of which we cannot suppose the other, is the logical condition of the other; and that which is the occasion of the other, which comes first in point of time, is the chronological condition of the other; thus the idea of space is the logical condition of the idea of body; while the idea of body is the occasion, the chronological condition, of the idea of space. After the idea of space, Cousin takes up the ideas of *time*, *infinity*, *cause* and *effect*, &c., and finds they cannot, such as they are in our minds, be derived from the theory of Locke. And thus the evident conclusion is, that there must be another source of ideas besides sensation and reflection,—which overthrows the system of Locke.

Knowledge, according to Locke, is the perception of the agreement or disagreement of two ideas; and where these ideas conform to their archytypes (objects), there our knowledge is real. Now Cousin says, that in order that an idea should conform to its object, it must represent it; that is, must be an image of it; but image implies something material; and therefore an idea which conforms with its object must be a material image of its object. Cousin takes up the idea in relation to the external world, the soul, and God. First with respect to the external world: bodies according to Locke are known by their qualities, the primary and secondary. The most important of the primary qualities is solidity, that is, a resisting cause; now that this primary quality should conform to its object, it must be a material image of it; but what can be the material image of a cause? Thus the theory of Locke excludes the knowledge of the primary qualities; in the same manner it excludes the knowledge of the secondary qualities, and thus of the external world.

In considering ideas in relation to the soul (spirit), Locke falls into a paralogism; because, being unable to derive a knowledge of finite spirits by his theory, he throws himself into the arms of *faith*, and appeals to revelation; but Cousin does not allow him

to rest here, because revelation supposes a book and God (infinite spirit) ; the first is impossible for Locke ; and in order to get the knowledge of a finite spirit, he acknowledges an infinite spirit. Thus the theory of Locke in relation to the objects of knowledge leads to scepticism, and thence to nihilism. Now in reference to the subject (the mind), if we suppose the idea to be a material image, it tends to make the mind material, and leads to materialism; and if spiritual, to nihilism again. Cousin then changes his ground, and, admitting the representative theory, sets out to compare the idea with its object ; but a comparison is only possible on the supposition that we have the object itself and its idea to set them side by side; thus we must have a real knowledge of the object itself by another way besides the theory of Locke.

GANESH DHONDEO.

In the Essay on the Human Understanding Locke proposes to treat as follows :—

1*st*.—To make inquiry into the origin of all our ideas,—the sources from which we get all our ideas.

2*nd*.—To find out what knowledge the understanding hath by those ideas, and the certainty, degrees, and extent of this knowledge.

3*rd*.—To make researches into the degrees of assent or probability :—how the mind pronounces certain propositions as true and others false.

The method Locke adopts is first of all to find the origin of our ideas, and then to show the relation of ideas to knowledge. Now evidently Locke begins at the wrong end. He searches into the origin of ideas, before knowing the actual characters of those ideas, what those ideas are in themselves: to show the origin of a thing without the least knowledge of the actual characters of that thing. This would lead to a hypothetical origin,—an origin which may either prove false or true. If it is not luckily hit upon as a true one, it would cause errors in the researches, and hide the actual characters of the ideas.

The scientific method to be adopted in physical researches should also be adopted in psychology. *First*.—To observe all

the phenomena which consciousness attests to us, and collect them. Two rules ought to be observed in this: 1*st*, to omit none of them, and 2*nd*, to suppose none. *Secondly.*—After having collected and observed the actual characters of such phenomena, we may safely inquire into their origin.

According to Locke, all our ideas are derived either from sensation or reflection.

Sensation, or the impressions made upon our senses by the outward objects, is one source of our ideas. The operations of our soul, when perceived and reflected on by ourselves, furnishes with another set of ideas, as the ideas of willing, thinking, perceiving are obtained by *reflection*. He further says that every idea we have come[s] from one of these two sources. Well, let us examine whether these two sources exhaust all our ideas. Let us take the idea of space. According to him, the idea of space is got by sight and touch. But we know that sight and touch give[s] the idea of something resisting, solid, and that is body. So that space is reduced to body. But space is distinct from body. It is that in which the body exists. Then it is not got by the sight and touch, neither is it got by other organs of sensation, nor by reflection; therefore it [is] got from something else. No sooner is the idea of body given us by sight and touch, than the understanding, by its own innate virtue, conceives it to be existing somewhere, that is in space. Thus, on occasion of the idea of body being given by sensation, the idea of space is furnished by the mind, the intelligence, or the reason. Besides this, there are many ideas which are not furnished by mere experience,—sensation and reflection. It is true that experience is the condition of all our knowledge. Knowledge begins with experience, but it is not true that therefore experience is the source of knowledge.

According to Locke, the mind knows not things immediately, but by an intermediate called the idea, and real knowledge consists in the conformity of this idea to the object. Then in order to real knowledge the idea must conform to the object. But in order to perceive their conformity, we must know the idea and the object, which latter, according to Locke's theory, we know by an intermediate idea, and consequently we have the idea of the

object and not the object itself to compare. In this manner we may go round in a circle, and never know the object. But suppose we know the object, in order to compare [it] with the idea, what follows? The theory of Locke falls to the ground, for there is no use in comparing when we know the object itself. We have an immediate knowledge of objects.

He further says, knowledge consists in the perception of the agreement or disagreement of our ideas. This theory requires, 1*st*, at least two terms or ideas; 2*nd*, the comparison of these ideas; and 3*rd*, the perception of the agreement or disagreement between them. But all our knowledge is not got by such a comparison. We know many things immediately by themselves, without comparing the two terms. The cognition, for example, *I exist*, is got immediately without the comparison of any two ideas. A single phenomenon of consciousness is sufficient to give the knowledge of the *me* existing independently of that phenomenon. In the same manner the cognitions, *I think*, *I feel*, *I will*, are obtained without any comparison of ideas. They are immediate cognitions. Consequently this theory of Locke falls to the ground.

EDALJI SHAPURJI.

2. The mind, when it takes notice of things, cannot but observe several viscisitudes in substances. That bodies begin to exist, and that this existence they owe to other bodies. They also undergo several changes, by being acted upon by other bodies. The property which bodies possess of changing other bodies, or giving them their existence, he (Locke) terms cause; and the change brought about by the instrumentality of a cause, or the thing produced, he calls effect. He exemplifies this by the instance of wax assuming fluidity when brought in contact with fire.

Let us examine this theory. In the first place, the idea of cause is no doubt in the human mind; it is our business, then, to inquire, how it is there, and with what characteristics. Let us take the phenomenon of wax turning into a fluid by the contact of fire. What do we perceive? We perceive first the phenomenon of wax, then of fire in contact with it, and

lastly the phenomenon of wax becoming fluid. What do we perceive else? Nothing certainly. We see one phenomenon succeeding another, and nothing else; this is a mere succession. We might suppose the same thing taking place a hundred times, a thousand times; still it is a succession, and nothing more than a succession. Now let us see if this be the only idea of a cause in our mind? Whether we do not attach to the word something more than a succession? To exemplify this, let us take an example generally given; I wish to hear a musical sound, and no sooner is my volition complete, than I hear a note coming from the neighbouring apartment. Next, I will to produce the sound myself, and do produce it. Now what connection is there between my wishing and the sound that came, and also my wish and the sound I produced? Is there not something more between my wish and the sound that I produced than the accidental hearing of the sound and my wish? Do I not in the latter case attribute to myself the cause of the sound that I produced? Mere succession, then, does not give the idea of cause as it is in the human understanding. And as sensation cannot give me more than the phenomena of successions, it cannot give the idea of cause.

Neither from reflection do we get the ideas of cause. It is then solely from Reason that we have it. Locke, also, in another place says that we do not get the idea of cause from external objects, but from the actions [operations] of our own mind.

PARASHARAM VISHNU.

3. The mind of man, according to Locke, is like a sheet of white paper, without any characters, which after his coming into the world is furnished with ideas. Locke admits that all of our senses come at once into operation, but the ideas thereby furnished to the mind are distinct. Each sense in his opinion furnishes its ideas separately, the idea of one not being mingled with those of any other; and not only are those of one sense distinct from those of the others, but every perception is as separate from any other as it is from those of the other senses. Though the ideas of hardness and heat of a piece of iron are received from the same sense, viz. feeling, yet the one is as distinct from the other as either of

them from the colour of the metal. Thus far with regard to sensation, one of the sources of our knowledge. It is the same with regard to the other source,—reflection. The operations of the mind also furnish their ideas quite distinct from one another. This being the first process with regard to the acquisition of our ideas, the first ideas we receive are *simple* ones. The mind afterwards by its other faculties unites these simple ideas together, and thus comes to have the other set of ideas, viz. *complex* ones. This is the theory of Locke with regard to the acquisition of simple and complex ideas. Cousin objects to this doctrine, and states that the true process of the human mind is entirely the reverse. He says, that because all our senses come into operation at one and the same time, our first ideas are complex, which by abstraction and analysis reduces into their elements the simple ideas. The acquisition of simple ideas is a work requiring more activity than is required in the first. The simple ideas are more general and abstract than the complex ones, which are particular, and determinate; and as the particular are acquired before the general, the former, that is the complex ideas, preceed the latter, that is the simple ones.

PANDURANG BALIBHADRA.

5. Locke says that general and universal are creatures of the understanding; they have no real existence in nature. Thus the idea of book implies no real existence, and hence the rise of Nominalism. But there are certain ideas which imply real existence; for instance, the idea of space and time; and hence the rise of Realism. The former school maintains that there is nothing real, and the latter maintains that everything is real. It is true that some ideas do not imply real existence; but we are not to conclude from this that all ideas do not imply existence. The error of both schools lies in going to extremes.

NILKANT MADHAVRAO.

MORAL PHILOSOPHY.

Third Year's Students.

1. The changes which we have undergone from our birth to maturity make it probable that we may undergo other changes by death, and still continue to exist. The same thing may be inferred from the changes which other animals undergo, namely, the transformation of worms into flies, and birds issuing out of eggs.

That we have capacities of perception and of action before death, makes it probable that we shall retain them after death, unless it be shown that death is the destruction of them. But the proof that death is the destruction of our living powers must arise either from the reason of the thing, or from the analogy of nature. It cannot arise from the reason of the thing; for we know not on what our living powers depend; we know not on what even their exercise depends; neither do we know what death is in itself, so that our ignorance forbids us to infer anything from the reason of the thing. Neither does the proof arise from the analogy of nature; for death removes the lower animals from our sight, so that we know not what becomes of them.

But our imagination misleads us, when it represents to us that death is our destruction; this goes on the supposition that our soul is compounded, and so discerptible, but it is not so; for [as] our consciousness is single and indiscerptible, so must be the subject in which it resides.

Again, from the loss of our limbs, and other organs, and of the whole body, by constant attrition, we see that this external matter is not the living agent, and that its dissolution is not the same as that of the living being.

Again, man here exists in two states, in a state of sensation, and that of reflection; again, in our dreams, we preceive ideas, and reflect on them, without the use of our organism at all; so that after the dissolution of this by death, we may still perceive and reflect on and enjoy those ideas which we have collected in this life.

From all these arguments, it is probable that we may exist hereafter.

That in the present world we see signs of God's government, we see that prudence and imprudence are respectively rewarded and punished; so that God is our governor, and that He rewards and punishes us is certain. That He rewards and punishes according to certain principles, and that we have a moral faculty—these facts clearly lead us to infer that He must also be a moral being, and that His future government must be moral, and that He will reward the righteous, and punish the wicked.

Again, that vice as prejudicial to society is generally punished, and virtue as beneficial is often (though not fully) rewarded, show that, even in this world, virtue and vice are respectively rewarded and punished; and that there is a probability of a future state of reward and punishment.

That we feel satisfaction and easiness when we are conscious of doing virtuous actions, and on the contrary remorse and uneasiness after acting viciously, is in some degree the sign of the moral government of God established here; so that it will probably be completed in the future.

Again, there is a tendency of virtue to superiority, in the same manner as reason has the superiority over brute force. And though there are continual interruptions to it, these are merely accidental, and the tendency of virtue towards superiority over vice is natural, and in the long run we may expect virtue to be triumphant, and its success lasting. From this we may expect that our Almighty Governor is on the side of virtue, and therefore the future state of reward and punishment is certain.

FARDUNJI JAMSHEDJI.

2. We are in a state of probation in this present world; that is, in a state of trial, danger, and difficulties. The word probation implies temptations to wrong, and difficulties in adhering to what is right. The various temptations which surround us, the deceits of wickedness which we experience, the ungovernable passions directed to their proper gratification,—all these render the present world to be a state of probation peculiarly fitted to form habits of virtue in us. These ungovernable passions in us will, in trying to attain their objects, lead us wrong ourselves, and the more they are satisfied the more the

nature of man is debased. Now man is endowed with capacities of reflection and action, and these are capable of being enlarged by improvement. We moreover get a facility in any kind of action and a settled alteration of temper and character, so that we are capable of forming habits.

What reason is there that we see so much misery in this world? The answer is that it has been brought about by the action of man himself. God has provided him with conscience, together with the passions and affections, and has left him to choose the way his conscience would direct to him. He takes a wrong course, despises the dictates of conscience, and brings misery upon himself. This world, then, is fitted to form in us habits of virtue. Suppose a particular passion leads us astray; our conscience disappoves of the course, and we obey the dictates of conscience, what would happen? Our conscience, or the moral principle within us, would prevail, and assume its natural authority. Again, suppose the influence of our passion is not wholly destroyed, we are tempted a second time to gratify our passion; but the moral principle in us again comes in, and denies passion its object. Thus, by often attending to the moral principle within us, whenever we are surrounded by various temptations, habits of virtue are formed in us. It is not by once attending to it that we get habits of virtue, but they are wrought in us by constant exercise of them; and the man who has them in him thus wrought has less fear to be carried away by his passions. But the generality of men do not attend to the necessity of forming habits of virtue, and are consequently led wrong in their behaviour. There are few in this world who by constant attention have formed in them these habits of virtue.

BALKRISHNA SADASHIV.

3. As the constitution of a civil government implies that the several individual members composing the government are united together under one direction, and act in subordination to the head or superior member amongst themselves, so the constitution of man signifies that there are certain principles, propensions, and affections, which compose this constitution, and which must of necessity and of course be united together under one

direction, and must act in subordination to one superior principle amongst themselves. Therefore these principles, propensions, and affections, when exercising their influence on the constitution of man, act under the control of their superior, and are checked and condemned by it whenever found outstepping their proper limits,—that is, whenever they exert their influence beyond their due bounds. This superior principle, whose office it is to keep the under principles in the constitution of man in due subjection, is the principle of conscience or reflection, which approves and disapproves the temper, heart, and actions of man, and magisterially exerts itself, without being consulted or advised with, being by nature and in itself supreme over all the other principles which exercise their influence on the constitution of man. Therefore, when any one of these lower principles prevails over their superior, namely the principle of conscience, then the whole constitution of man is violated and broken in upon, and their natural mutual relations disturbed, in the same manner as the constitution of a civil government is distracted and violated when any of the subjects prevails over the head of the government.

HARISHANKAR BALKRISHNA.

4. Moral obligations are acknowledged by every one, and even not destroyed by the opinion of necessity. This is seen from several reasons: from final causes; from our being under the government of God, carried on by a method of rewards and punishments; and from the moral principle of virtue implanted in us. This principle implies a sense of authority, and a right of direction: the former is to be understood of such a nature as a slight departure from it is attended with feelings of mortification; and the latter implies in it a rule of action in such a sense as not only to approve and disapprove our actions, but to guide our conduct in life. Although it is true that moral obligations would remain certain, yet they may oftentimes be violated; but the occasional violation does not imply their total destruction. Those that carry moral sense along with them in whatever they do will have no fear of their being led wrong, and it is an important thing, amounting to moral obligation, that we should hear the voice of conscience constantly speaking in us at every

time, and in whatever act we perform ; and although the conscience is prevailed upon by some one passion, and although we are ignorant as to what would be the consequences of this prevalence, yet it does not destroy the thing that we are under the moral obligation to be guided by conscience.

BALKRISHNA SADASHIV.

5. The question carries the answer along with itself,—to obey our conscience is the obligation itself. Our conscience, attesting such a course of conduct which we are bound to observe, constitutes obligation. Some have raised objections against obeying the rule of right which we find within ourselves, on the plea that why should we have regard to anything beyond ourselves; and if we find certain principles which lead us to do good to others, why should we not endeavour to eradicate them, when hindering us from attaining our own good ? But all these words, when applied to the nature and circumstances in which mankind are placed, have no meaning in them. Is it that men find their happiness in this world in some other things than what we know, and is it the privilege of vice that it has no restraints? The pleasures of common life, and even the pleasures of vice, depend upon society ; and if there were no restraints of fear and shame, injustice and honour would be the same. So that restraints are necessary when we wish to gain our object ; we cannot gain our object unless we are confined to certain means. At first sight we find many difficulties, but subsequently these difficulties give way to habits. Is it not the meaning, then, that we should indulge those regards to our fellow creatures, and submit to those restraints which, upon the whole, produce more satisfaction, and less uneasiness than those which produce less satisfaction and more uneasiness? Undoubtedly this is our meaning. But let us throw some more light on the subject. Let it be not taken for granted that the temper of envy, rage, and resentment produces more satisfaction, especially when they are in themselves misery, than compassion, good-will, and what is of good report. These are in themselves good, and afford new positive delight, while those are in themselves bad, and afford pleasure little more than relief from that misery. Again, let it be not

taken for granted that riches, honour, and ambition produce more pleasures than veracity, justice, and charity, which are the foundation of religion. The former is attended with pleasure mixed with pain, whereas the latter, with pleasure mixed with new pleasure.

KAHANDAS TAPIDAS.

HISTORY.

CANDIDATES FOR CLARE (JUNIOR) SCHOLARSHIPS.

1. The Ionians were remarkable for their democratic spirit, and their consequent hostility to hereditary privileges. They were vivacious, prone to excitement, easily induced to make important changes in their institutions, and proud of their country and themselves. They cultivated the fine arts diligently—a consequence of their being fond of refined enjoyments. They were favourably disposed towards commerce; but, not unlike too many other free states, they encumbered it with short-sighted restrictions, and they were cruel masters to their colonial dependencies.

The Dorian race, on the contrary, was remarkable for the severe simplicity of their manners, and their strict adherence to ancient customs. They were friends to aristocratic form of government, and the qualification that was required from candidates for magistracy was the advanced age of sixty, because the old are usually averse to a change in their institutions. Slavery prevailed in its worst form in every Dorian state, and those poor men had no hopes of getting themselves free from bondage, for the object of the Dorian legislation was to fix every man in his hereditary condition. Commerce was discouraged on account of its tendency to change the ranks of society, and the fine arts were prohibited, for they were supposed to lead to effeminacy. The great advantage that the Dorian institutions possessed over the Ionian was their permanence, but this is rather a doubtful advantage, for the progress of improvement was checked, and no means furnished to reform those parts of their institution that became unsuited to their condition by the progress of time and by circumstances.

2. The more rapid development of Political Science in Greece

than in any other country is to be accounted for by its containing as many free states as cities, each of which had a form of government peculiar to itself. It was facilitated by revolutions, which are always natural to a state whose limits are narrow. The supremacy of the principal state was called by the Greeks *Hegemony*. It consisted in determining the foreign relations of the inferior state, binding it to all the wars in which the capital engaged, and to all the treaties of peace which it concluded; but it did not allow of any interference in the internal management of the state.

3. The city of Rome was founded in the year 753 B. C. Royalty was abolished in Rome B. C. 509. The revolution was brought on by the Patricians. When Servius Tullius was murdered in the senate house by an aristocratic faction, which was headed by Lucius Tarquinius, the ringleader was raised to the throne by the Patricians, who were themselves soon made to feel the weight of the tyranny of the king of their own making. While Tarquinius was besieging Ardea, his son Sextus violated the honour of Lucretia, a noble Roman lady. She summoned her relatives, and having informed them of the outrage, committed suicide. Lucius Junius Brutus, who before this time had concealed all patriotic notions, under the pretence of insanity, though he held an important magistracy, convened an assembly of the people, and exhibited to them the bleeding body of Lucretia. A decree was immediately passed for abolishing royalty. The Tribunician power was formidably increased by the "Lex Valeria," B. C. 446, which invested the votes of the commons with the force of law.

4. The most important of the advantages which the Popes derived from the wars of the Crusaders, was that their power to interfere in the internal management of states was generally recognised. They compelled the kings and emperors to join the wars, they levied taxes at their discretion on the clergy throughout Christendom to support them; they took under their protection the person and property of those who enlisted, and granted privileges to the crusaders which it was thought impious to contravene. Those who went to carry on the wars frequently bequeathed their estates to the Church, in case they might die

without heirs ; those whom the state of their political affairs rendered incapable of directing their attention to these wars, disarmed the vengeance of the Pope by founding new ecclesiastical endowments. Considered in a general point of view, the monarchs of Christendom found their authority declined. The English barons placed a permanent restraint upon the authority of their king by extorting from him a charter fixing the privileges of the barons and people with which the king was prohibited from interfering. The Hohenstauffen lost all authority in Germany, and the Hungarian chiefs placed a similar restraint upon their sovereign. Chivalry derived its chief influence and strength from these wars. The armies that were collected from Christendom being composed of men differing in habits, language, and feeling, the use of surnames, coats of arms, and distinctive banners became necessary. Knighthood was established, and tournaments were held. The first order of knights was that of the Hospitallers, or Knights of St. John of Jerusalem, distinguished in a later time as Knights of Malta. The order was established by Pope Paschal, A. D. 1114, and it was greatly enlarged by Pope Calixtus. It was distinguished by an octagonal white cross on their black robes, and they were bound to wage war on infidels, and attend to sick pilgrims. After the eventual capture of Jerusalem by the Mahomedans, the knights removed successively to Cyprus, Rhodes, and Malta. Their order held Malta till 1798 A. D., when they were deprived of their last stronghold by Napoleon. The Knights Templars were instituted soon after the Hospitallers. They bore a red cross. To them the duty of keeping the road free for the pilgrims that visited the holy sepulchre was assigned. By progress of time they became powerful enough to possess endowments in every part of Western Europe. At length their wealth excited the envy of monarchs ; they were accused of many immoralities and horrible crimes, and the Order was wholly abolished at the Council of Vienna A. D. 1312.

The Teutonic order of knights was formed during the siege of Acre, for the relief of the sick and wounded, A. D. 1192. They were distinguished by a white cross on their white robes. They subdued the kingdom of Prussia A. D. 1230, and retained posses-

sion of it until it was conquered from them by Albert of Brandenburg in the year 1525 A. D. The last great order was that of St. Lazarus, instituted for the treatment of leprosy, a disease which the crusaders introduced into Europe. It became military, but never rose to eminence. The Temple in London belonged to the Red Cross Knights, I mean the Templars. The Italian maritime cities supplied the crusaders with arms and transports. This gave a great stimulus to the navigation and commerce of the Mediterranean : a taste for spices, and other articles of the East was diffused throughout Europe, and trading marts were established by Venice, Genoa, and other Italian powers, on the coast of Levant, and other ports of the Greek empire. Several French towns imitated their example, and in the remote North an association for the extension and protection of commerce was formed between the cities of Lubeck and Hamburg, which laid the foundation of the Hanseatic League A. D. 1241. Thus the crusades were effective in extending commerce.

5. In the reign of King John in England, the barons, enraged by the tyranny and incapacity of the monarch, took up arms against him, and compelled him to sign the great Charter, which laid the first foundation of English liberty, A. D. 1215. In the reign of John's successor, Henry III., the nobles, enraged at the favour that the King showed to foreigners, formed an association at the head of [which was] Simon de Montford, Earl of Liecester, by which the King was deposed, and the supreme authority vested in a committee of peers, with Liecester at its head. Liecester introduced an important change in the English constitution by summoning deputies from cities, boroughs, and counties, to unite with the barons in the great council of the nation, and take a share in the legislation of their country. This innovation laid the basis of the House of Commons. The Parliament, in the reign of Edward III., established the three following fundamental principles of the British Constitution : the illegality of raising money without the consent of Parliament ; the necessity of both houses concurring in any alteration of the laws ; and the right of the Commons to investigate public abuses and impeach the royal ministers for maladministration.

RAMCHANDRA GOPAL.

SECOND YEAR'S STUDENTS.

1. The great subject of all history in the mind of Professor Smyth is the civil and religious liberties of mankind; for on them depend intelligence, prosperity, private and public, and national glory. The most successful instance in history of the assertion of these rights is the Revolution of England, and the elevation of William III. The two great questions which must occupy the students of this reign, are, therefore, the liberties of England and the liberties of the Continent. That is to say, 1*st*, whether the Revolution of England was to succeed, or the exiled family was to be restored; 2*nd*, whether Europe was to be enslaved, or the ambition of Louis checked.

2. In the time of Sir William Temple, the power of the House of Commons was a growing power. That power had been constantly on the increase from the reign of Elizabeth. In her time the power of the Crown was decidedly predominant in the State. In the time of Charles II. the House of Commons was decidedly predominant. It had drawn to itself as much of the prerogatives of the Crown as it chose, and was daily making encroachments on others. The King, Charles II., was, however, a man who chose to be the dependent of a foreign prince rather than be the powerful and respected sovereign of a free nation. He had sold himself to Louis, that the latter might oppress the liberties of Europe, and the Catholic religion might be restored in England. To such an extent had the misgovernment gone on in the interior, that it could go no further. The nation were in a rage. The Court was alarmed. Under such circumstances, Sir William proposed to the King to substitute for the Privy Council, which then consisted of 50 members, and which was represented by a smaller interior council, called the Cabinet, a council of thirty members. Fifteen of the members of this new council were to be great officers of the state. The other fifteen were to be independent gentlemen. Their united annual income was to amount to £300,000. The united income of the members of Parliament was about £400,000. It has generally been thought by historians that Sir William intended to effect a change of administration; and so considering it, they have condemned it as extravagant and absurd. For unity, secrecy, expedition, despatch,

compromise, are qualities requisite for an executive cabinet. Division, opposition, long deliberations, are the characteristics of large assemblies. Even thirteen is, according to the Duke of Wellington, too great a number for an executive board. But it was not for an executive board that Temple intended this council. His own words "this constitution" sufficiently convey what he meant. The expression of Barrilon, who called it "The Assembly of States," fully confirms it. It is therefore probable that he meant to effect, under colour of making a change in the government, a real change in the constitution of the realm. Sir William reasoned that as a great revolution had been effected in the internal constitution without a corresponding change in the outward forms,—as Parliament had insensibly drawn to itself the prerogatives of the Crown, so a counter-revolution might be effected in the same manner. He thought that the English people would not bear to be governed by the unchecked power of the sovereign; nor ought they to be so governed. At present, the great check upon the King is the Parliament. That the King's hands might not be unduly tied by others, he must consent to tie them gently himself. When the nation saw that fifteen independent gentlemen of large estates, who had every motive in not suffering their country to be misgoverned, had seats in the council, and that they daily represented their grievances before the King, they would be less disposed to interfere with the government. They would afford less support to the House of Commons, which would meet at long intervals, and on extraordinary occasions; for when it met, it would find less abuses to attack, because the fifteen members would not suffer any abuses in the government. Thus the power of the House of Commons would become, in all but theory, obsolete. It might meet, like the States-General of Holland, once in every twenty or thirty years, to congratulate a King on his accession, or give solemnity to some great measure of state.

MOTILAL JIVANDAS.

6. The first expedient which a country naturally adopts is to take the regulation of the press into its own hands, or allows the executive magistrate to do so. In England, all books containing

schismatical, heretical, and other dangerous opinions, were prohibited to be published by a law. All books on the law of the country were published by the order of the Lord Chancellor, or Lord Chief Justice. All books on history and politics were published by the order of the Secretaries of the State, and books on divinity, physics, sciences, &c. were published by the license of the Archbishop of Canterbury. So that a licenser is the first expedient resorted to by a government. This is the first stage.

The second stage is to dispense with the licenser, and to give a description of all the books injurious to the government, or to the people individually and collectively. But who are to show that a book published falls under the description or general terms? It might naturally be answered, the judges of the land, —men engaged in the administration of justice. Thus we arrive at the completion of the second stage: a law in general terms, and the judges of the land to decide whether the book falls under the general terms.

But then people would reason, that if instead of the judges, if twelve ordinary jurymen were to see whether the book comes under the general terms or not it would be much efficient. Thus we arrive at the third stage: a law in general terms, and the jury to decide. The degree of the penalty is left to the judges, being persons more accustomed to the use of power, and acting in the face of the country and the bar.

In France the first stage has only been achieved.

Smyth addresses three observations to those who wish to make it a subject of meditation:—

First.—The law is expressed in general terms; but it is very difficult to find what those general terms will be.

Second.—As the jury is to decide, it is important to know how the jury is composed, and by what officers the jurymen are selected, &c.

Third.—The degree of penalty is left to the judges, but the temperament of the judges is to be taken into consideration. On the whole, to pronounce the degree of penalty, the least objectionable men we can find are only the judges.

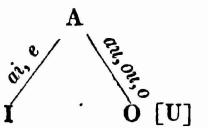
EDALJI SHAPURJI.

LITERATURE.—I. PHILOLOGY.

First Year's Students.

1. The native country of the English language is Germany. According to tradition, Kent was the first district where the original British language was superseded by the Jutes, under Hengist and Horsa, 449 A. D. The South Saxons under Ella, 477 A. D., settled in Sussex; the West Saxons settled in Wessex (Hants) in the year 495 A. D.; and the East Saxons settled 530 A. D. in Essex. These nations, shown by the common name, does not necessarily mean they were all Saxons, but, as is said, they came from various parts of Germany.

2. The three fundamental vowels are A, I, O [U]; they are pronounced आ, इ, उ respectively. Their Hindustani are ا, ي, و.



3. The Sanscrit consonants are divided into labials, dentals, cerebrals, gutturals, and palatals.

फ y sics } science of beings.
B e ing }

Mercy is the mutilation of the word "misericordia": here miser = wretched, i the helping vowel, and cordia means heart. It is changed into mercy thus—

Misericordia. } Here cordia is identical with { ځ co rd.
| || | | } heart. { | ||
M er c y. } { ح heart.

4. Am/me (ڭ, मी) Dost/thou (ڭ, तु) Doth/he (ते, तो)

5. Deter from terrio[eo], I terrify; inter from terra, the earth; cousin from consanguinis—con, together, and sanguinis, blood. Balance, a two dish machine, from bi, two, lanx, dishes. Navigation from náva (náv), a ship.

6. (English) man, (Sanscrit) मनुष्य, (Latin) hominis [humanus], (German) mann or mensch. (Eng.) woman, (Sans.) गानि [गणीका], (Greek) gune (pronounced gunay). (Eng.) father,

(Sans.) पित्र [तृ], (Gr.) pater, (Persian) پادر, (old high German) Vatar[er]. (Eng.) mother, (Sans.) मात्र [तृ], (Per.) مادر, (Gr.) mater. (Eng.) son, (Sans.) sunus सुनु, (Per.) souns, (Ger.) sohn. (Eng.) daughter, (Sans.) दुहीतार [दुहितृ], (Per.) dokhter, (Ger.) tokhter, (Gr.) thugater, (Irish) Ersedear.

JEHANGIR FRAMJI.

2. The three fundamental vowels are A, I, and U; the first is pronounced as आ, the second as इ, and the third as उ.

"Physics" and "being" are identical.

The letter-changes are { Phys ics / Bei ng } P is the same as b, *ics* same as *ing*, both being terminations.

4. The pronominal elements which form a part of "am," "doth," "does," are me (मी,) thou तो, ते.

5. "Deter" from terrio[eo], I terrify, frighten; "inter" from terra, earth; cousin from con-sanguinus[is], together blood.

The Sanskrit root in "navigation" is nav नाव [नौ], gation, जाना [गती].

JAGANNATH NARAYAN.

SECOND YEAR'S STUDENTS.

1. Only three languages enter into the composition of the English, which are as follow: the Gothic, the Classical, and the Celtic. The five stocks are those of Classical, the Gothic, the Celtic, the Sarmatian, and the Iranian. In Wales the original language, Celtic, is still spoken, and also in some parts of Ireland. The Anglo-Norman, the Latin, and the Scandanavian [German], of the Gothic and Classical stocks, illustrate the English language. Out of all the above-mentioned three stocks, the Gothic is the most important.

GANPATRAO BHASKARJI.

3. The great stock of which the Germanic tongues constitute one branch is *Gothic*. The other branch of this stock, namely the Scandinavian, comprehends under it (1) the languages of the Danish isles and Jutland, (2) that of Norway and Sweden, (3) that of Iceland, and (4) that of the Feroe Isles. On the side of

Lapland, the languages of this branch come in contact with the Laplandic tongue, and on the side of Slewswick with the Low Germanic.

6. The Latin spread—1*st*, to the Spanish peninsula, where it overlaid the languages of the Biscayan stock, or Iberic stock; 2*nd*, to Gaul, where it overlaid the Celtic; and 3*rd*, to Dacia and Pan[n]onia, where it overlaid the Wallachian. From the Latin and the Italian came the modern Italian, from the Latin imported into the Spanish peninsula came the modern Spanish and Portuguese, from the Latin imported into Gaul came the modern French, and from the Latin into Dacia and Pan[n]onia came the modern Wallachian. One essential cause of the differences is the different original language upon which the Latin was engrafted. They are divided into the Italian and the Trans-Alpine.

MOTILAL JEVANDAS.

II. POETRY.

SECOND YEAR'S STUDENTS.

1. * * * * * *

The cheerful man hears the lark in the morning pouring forth her soul in songs of exquisite tenderness:

"To hear the lark begin his flight,
And, singing, startle the dull Night,
From his watch-tower in the skies,
Till the dappled dawn doth rise."

When the morning comes, the pensive man, on the contrary, falls asleep by some murmuring water, and hides himself from Day's garish light;

"And when the sun begins to fling
His flaring beams, me, goddess bring
To arched walks of twilight groves
And shadows brown that Sylvan loves."

The cheerful man walks "not unseen" to observe the glory of the rising sun, or listen to the singing milk-maid; he enjoys the glowing scenes around him, and looks up to the distant tower,

"Where perhaps some Beauty lies,
The Cynosure of neighbouring eyes."

Thus he passes the livelong day in rural scenes of gaiety and play, and delights himself in the night by the recital of some superstitious narratives:

" With stories told of many a feat,
How fairy Mab the junkets eat ;
She was pinched, and pulled, she said,
And he by friar's lantern led :
Tells how the drudging goblin sweat,
To earn his cream-bowl duly set."

The melancholy man, however, is of quite a different constitution. In the evening, he hears the solemn curfew, and wandering through retired places, wishes

" The mute Silence hist along,
'Less Philomel will deign a song,
In her sweetest, saddest plight,
Smoothing the rugged brow of Night,
Sweet bird that shunn'st the noise of folly,
Most musical, most melancholy."

Instead of enjoying society, he walks unseen to muse at midnight; or, if the weather does not permit, he goes home and sits in a retired place,

" Where glowing embers through the room,
Teach light to counterfeit a gloom."

Or he wishes to be poring over some abstruse, melancholy studies, in a lonely tower by midnight:

" Or let my lamp at midnight hour,
Be seen in some high lonely tower,
Where I may oft outwatch the Bear,
* * * * or unsphere
The spirit of Plato."

Dr. Johnson says that in L'Allegro, " no part of the gaiety is made to arise from the pleasures of the bottle." In truth, and reality, Milton means to pourtray the cheerfulness of the Philosopher or the student, the amusements of a contemplative mind—the enjoyments and amusements only of an innocent kind.

On this account, it seems to me that the remark of Warton

that Johnson had not dipped into the *true* spirit of L'Allegro, appears to be founded upon justified grounds.

2. *Tale* is a technical term for numbering sheep. Dryden uses it thus:

"And once she takes the tale of all my lambs."

DARASHA DORABJEE.

6. The second line in the passage admits of two constructions. The one is "pale cloysters," that is "pale" for want of sufficient light; the other would be "cloyster's pale" that is the pale (compound) of the studious cloysters. In the first construction "pale" is an adjective; and in the other it is a noun. Storied windows signifies, that ancient history was painted on the glasses; richly *dight* means richly decked. The word *anthem* should be spelt "anti hymn"; it is derived from these two words—anti (against), and hymn (religious song); and this was so called because the hymns were not sung simultaneously by both the quires, but one after (against) another.

GANESH DHONDEO.

POLITICAL ECONOMY.

FIRST YEAR'S STUDENTS.

1. Political Economy, according to Mr. Mill, is the science of Wealth. Writers on Political Economy profess to investigate the nature of Wealth, its production and distribution.

Productive labour is that which is employed in creating utilities fixed and embodied in material objects. Mr. Mill includes in this class not only the labour which has production for its direct result, but any labour, provided an increase of material products is its ultimate consequence, such as the labour expended in acquiring skill, knowledge, and dexterity in working. Though this labour does not terminate directly in the production of material wealth, it may be regarded as productive, for it is the means by which an increase of material products may be obtained.

Mr. Mill objects to the definition of the science of Political Economy given by Mr. Whately. Whately says that Political Economy is the science of exchanges, or Cattalactics [Catallactics] as he calls

it. According to Mr. Mill, the science of Political Economy is of a greater extent; it is not merely confined to exchanges. Of the two great departments of Political Economy, those of production and distribution, exchange has to deal with the latter alone, and that only as far as competition is concerned, and usage or custom is not the distributing agency. Even in the present state of things, in which every one lives, not only on the products of his own labour, but also on the products of the labour in which he took no part, exchange is not the fundamental law of distribution, no more than roads and carriages are the essential laws [of] motion, but a part of the machinery for effecting it.

Such views may be attributed to an error, too common in Political Economy, of not distinguishing the necessities arising from the nature of things, and those created by social arrangements—an error causing Political Economists on the one hand to class the temporary truths of their subject among the most permanent and univeral laws of production, and on the other hand leading persons to mistake the universal laws for the most temporary laws of the subject of Political Economy.

2. The requisites of production are divided into two classes—the primary requisites of production and the secondary requisites. The primary requisites are labour, and the material and motive forces afforded by nature, and the secondary requisite, capital. Capital is termed secondary, because, it being the result of labour, its instrumentality in the production is that of labour in an indirect shape.

The modes in which labour is indirectly instrumental to production are five in number, viz. 1*st*, labour for producing food for the labourers while engaged in the work; 2*nd*, the labour for producing materials, or extractive industry, as it is called (furnishing both materials and ultimate products); 3*rd*, labour for making implements; 4*th*, labour for protection—as for instance the labour employed in building factories, in making hedges for protecting agricultural produce, &c.; 5*th*, labour for the transport and distribution of the produce when completed. In this class is included the labour for constructing railways, canals, &c. To these five labours are added the labour for human beings, and the labour for inventions and discoveries.

3. Circulating capital is that portion of the capital of a community which, being once employed, exists no longer as capital —is no longer capable of rendering service [at least not the same service] to production. The materials of production and the wages of the labourers are illustrations. As this kind of capital is destroyed as such by a single use, it should be replaced wholly from the product of that single use. Fixed capital is that portion which consists of tools, machinery, buildings, &c. which are of a more or less permanent nature, and which produce their effect not by being parted with, but by being kept, and the efficacy of which is not exhausted by a single use. In the case of fixed capital it is not necessary (as it is in the case of circulating) that it should be wholly remunerated from the product of a single use.

Suppose a farmer has two thousand quarters of corn, which he employs in paying the labourers who work on his land. Suppose also that he derives a profit of four hundred quarters annually, and consumes it every year. Now let us suppose that he wishes to invest half of his capital in the permanent improvement of his land. In the first year there would be no difference in the condition of the labourers; for the one half of his labourers who were previously paid for sowing, reaping, &c. will now be paid for their being employed in making the improvement. But in the next and every succeeding year he has only his thousand quarters and the improved land. He, therefore, cannot employ as many labourers as before, the labour of half of whom he can dispense with. The improved land with a circulating capital of a thousand quarters will at most produce one thousand and five hundred; so that the farmer gets a profit twenty-five per cent. Here, then, though the improvement gave an increased profit to the farmer, yet the labourers are the worse off by it.

The extra profit of one hundred may be annually saved by the farmer; and thus the annual accumulation will, after a few years, not only replace the capital sunk in the improvement, but multiply it manifold. The farmer will then have a motive to become an employer of further labour; and thus the labourers are no way injured by the improvement.

4. The term value admits of two meanings; sometimes it

means value in use, and sometimes value in exchange. Of these two, Political Economy is concerned with the latter only ; the laws governing the former cannot be treated in the science.

Value is distinguished from price. By the price of a thing is meant its value in relation to money. The value of a thing is its capacity of purchasing in general. This distinction guards against some popular errors with respect to value. There cannot be a general rise or general fall of values. It is a contradiction in terms. Value being a relative term, a rise implies a fall, and a fall a rise. There is such a thing as a general rise or fall of prices, but this is equivalent to a change in the value of money, and is of no importance to any one except those who deal in money, and who are the holders of funds.

5. That a thing may have any value in exchange, two conditions are necessary. It must be of some use, and secondly, there must be some difficulty in procuring it.

Adam Smith explains the words " effectual demand" by defining it as the demand at the natural price, that is, at the price which enables the commodity to be permanently produced and brought to market. The law governing the value of those commodities that are absolutely limited in supply is that their value depends upon the equalization of demand and supply.

6. The ultimate elements of cost of production are of two kinds, universal and occasional. To the former belong labour and its remuneration, and the profits of capital. In the latter are comprised taxes (not general) and the scarcity value of the material.

Wages are an element in cost of production so far as they vary in different employments. It is only when profits enter more largely in the cost of production of some commodities than in that of others that they can have any effect upon value.

The value of those commodities which cannot be increased without an increase of cost is determined by the cost of production of that portion which is raised and brought to market at the greatest expense.

DADABHAI RUSTAMJI.

ETHICS.

Third Year's Students.

1. Our active and moral powers may be arranged in five classes ;—(1) Appetites, (2) Desires, (3) Affections, (4) Self-love, and (5) the Moral Faculty. Appetites take their rise from the body, and are given to us in common with the brutes ; they are occasional, and cease with the attainment of their object ; and they are accompanied with uneasiness. Desires do not take their rise from the body, and are not occasional. Affections are principles whose object is to communicate enjoyment or suffering to our fellow creatures. Self-love is a rational regard to one's own happiness. The Moral Faculty is a superior principle in the nature of man, by the aid of which he can distinguish moral truth from falsehood, right from wrong.

Appetites are three in number. (1) Appetite of hunger, (2) of thirst, and (3) of sex. The most important of the Desires are, (1) the desire of knowledge, or the principle of curiosity, (2) the desire of society, (3) the desire of esteem, (4) the desire of power, and (5) the desire of superiority, or the principle of emulation. Our Affections are divided into two grand divisions ; (1) Benevolent and (2) Malevolent. Benevolent contains under it, friendship, gratitude, paternal and filial affections, patriotism ; and under the Malevolent affections are included hatred, jealousy, revenge, and misanthropy. The principal of this last kind is resentment, on which the others are engrafted by erroneous opinions and criminal habits. That Appetites, Desires, and Affections cannot be resolved into Self-love, will be clear if we take the appetite of hunger, the desire of knowledge and parental affection, and mark distinctly the relations in which they respectively stand with Self-love. The object of the Appetite of hunger is not happiness but food, the object of the desire of knowledge is not happiness but knowledge, and that of the parental affection is to do good to the child.

That our sense of duty and enlightened regard to one's interests, though they lead to the same course of conduct, are yet quite distinct in themselves, is as explained in the following lines. There are four reasons for this assertion—1*st*, that there

are words in different languages for duty and interest which, although they agree in their application, do not coincide in their signification ; 2*nd*, that the emotions that arise from the contemplation of what is right and wrong are different from those arising from a rational regard to one's own happiness ; 3*rd*, that duty and regard [to interest] coincide in their ultimate effects is known only to philosophers from a long course of observation and experience ; and 4*th*, that moral judgments take their rise in the mind long before children acquire the principle of Self-love.

2. The most important question in Ethics is that right and wrong are the qualities of actions, and not merely subjective. The illustration which Bishop Butler has taken from geometry is that the sum of the three angles of a plane triangle is equal to two right angles. This fact existed in nature independent of our knowing it ; this is called abstract truths. But when we perceive this fact by our reason, we find it to be so ; this is called matters of fact. Locke and Hume contend that such inferences can neither be demonstrated by our reason nor our experience.

KAHANDAS TAPIDAS.

3. The examination of the principles of natural religion is a most important duty for several reasons : 1*st*, the relation in which we stand to the Author and Governor of this universe ; 2*nd*, our sincere expression of temper to moral truth ; 3*rd*, the satisfaction which arises from the examination of these principles.

Stuart [Stewart] says that, 1*st*, whatever begins to exist must have a cause ; 2*nd*, and that the combination of circumstances conspiring to ends implies intelligence. These two premises prove the existence of God. There are two proofs for proving the existence of God, *à priori* and *à posteriori*. He takes the second.

Butler says that we have an intuitive idea of infinity and eternity, which is impossible to be eradicated out of the being. And these are merely the abstract notions, and as every abstract implies a concrete, there must necessarily be something existing out of us to answer this idea, as a prototype for it. Now Stuart, in giving this demonstration, left [out] the important point that there must be something out of us answering this idea, which is impossible to be eradicated from the mind. Dr.

Clarke has stated that the *à priori* proof is fitted for speculative philosophers, such as Spinosa, who will not be contented with the *à posteriori* proof. And he says as abstract proofs of geometry and higher mathematics are known only to very few, this argument should not be pressed on the bulk of mankind, for very few can comprehend the truths of such a high science.

BHAIRAONATH MANGESH.

4. The moral attributes of God can [most] safely be derived from our own moral perceptions. The sentiment of approbation in our mind of the virtue of beneficence in others, the satisfaction we feel when we reflect upon our own actions that have done good to society, and the pleasure derived from the exercise of the benevolent affections, naturally lead us to consider goodness as the supreme attribute of God. All the objections against the goodness of God can be most satisfactorily answered by the arguments drawn from our own moral constitution, and strengthened by our ignorance of the plans of Providence.

5. The principle is that every good affection implies a love of itself. Goodness is in an infinite degree in the Deity, as has been seen to be. If we possess goodness in us, we love that in God, but if we do not love that in God, it shows that we want goodness—want virtue.

The test with Aristotle is pleasure.

For virtue consists in the union of our duty and inclination, and where these coincide we have no need of self-denial. Where we wish to do wrong, where our duty does not correspond with our desire, self-denial is necessary to restrain us from that wrong, and thus to the formation of habits; but there is as yet no perfect virtue in this state.

BALKRISHNA SADASHIV.

MATHEMATICS AND NATURAL PHILOSOPHY.

FIRST YEAR'S STUDENTS.

1. $\cos B = \cos b \sin A \sin C - \cos A \cos C$
   $\cos A = \cos a \sin B \sin C - \cos B \cos C$

$\cos B - \cos A = \sin C (\cos b \sin A - \cos a \sin B) + \cos C (\cos B - \cos A)$

$(1 - \cos C)(\cos B - \cos A) = \sin C (\cos b \sin A - \cos a \sin B)$

$2 \sin^2 \frac{C}{2} (\cos B - \cos A) = 2 \sin \frac{C}{2} \cos \frac{C}{2} (\cos b \sin A - \cos a \sin B)$

$$\cos B - \cos A = \cot \frac{C}{2} (\cos b \sin A - \cos a \sin B)$$

$$\frac{\cos B - \cos A}{\sin A - \sin B} = \cot \frac{C}{2} \frac{\cos b \sin A - \cos a \sin B}{\sin A - \sin B}$$

$$\tan \tfrac{1}{2}(A + B) = \cot \frac{C}{2} \frac{\cos b \sin A \sin C - \cos a \sin B \sin C}{\sin A \sin C - \sin B \sin C}$$

$$= \cot \frac{C}{2} \frac{\cos b \sin a \sin C - \cos a \sin b \sin C}{\sin a \sin C - \sin b \sin C}$$

$$= \cot \frac{C}{2} \frac{\cos b \sin a - \cos a \sin b}{\sin a - \sin b}$$

$$= \cot \frac{C}{2} \frac{\cos \frac{1}{2}(a - b)}{\cos \frac{1}{2}(a + b)}$$

$$\frac{\cos B - \cos A}{\sin A + \sin B} = \cot \frac{C}{2} \frac{\cos b \sin A - \cos a \sin B}{\sin A + \sin B}$$

$$= \cot \frac{C}{2} \frac{\cos b \sin a - \cos a \sin b}{\sin a + \sin b}$$

$$\tan \tfrac{1}{2}(A - B) = \cot \frac{C}{2} \frac{\sin \frac{1}{2}(a - b)}{\sin \frac{1}{2}(a + b)}$$

MANCHERJI DORABJI.

2. Let A B C (fig. 1) be a spherical triangle, whose side B C is completed in circle; the others, B A, C A are produced till they intersect each other in D on the other hemisphere. Now B F = A F D, and C E = A E D; taking therefore from each the common parts A F and A E, we have A B = D F, A C = D E; from these and the equality of the angle B A C with E D F the triangles are equal.

Now as the surface of a lune is proportional to the angle contained by the arcs that contain it, we can, taking H to be the surface of a hemisphere, state that

$$\text{C B E A} = \frac{\text{H. C}}{180^\circ}$$

The same way $BCFA = \frac{H.B}{180^\circ}$, and $AEDF = \frac{H.A}{180^\circ}$

Now it is evident that the triangle DEF does not belong to this hemisphere, and also that the triangle ABC is taken twice in preceding equalities : adding them up, therefore—

$$H + 2ABC = \frac{H(A + B + C)}{180^\circ}$$

$$\text{Or } ABC = \frac{\frac{1}{2} H(A + B + C - 180^\circ)}{180^\circ}$$

Now, that $H = 2\pi r^2$, where r is the radius, we have

$$ABC = \frac{\pi r^2 (A + B + C - 180^\circ)}{180^\circ}$$

Now however you may vary the triangle in its elements, nothing but the spherical excess $(A + B + C - 180^\circ)$ only will change; hence the area is necessarily proportional to it.

4. $\cos P = -\tan l \tan d$, and $\sin a = \sin l \sin d$

$$\frac{\sin a}{\cos P} = -\cos l \cos d$$

$$\sin a + \frac{\sin a}{\cos P} = -(\cos l \cos d - \sin l \sin d)$$

$$\frac{\sin a (1 + \cos P)}{\cos P} = -\cos (l + d)$$

$$-\frac{2 \sin a \cos^2 \frac{1}{2} P}{\cos P} = \cos (l + d), \text{ and}$$

$$\frac{\sin a}{\cos P} - \sin a = -(\cos l \cos d + \sin l \sin d)$$

$$\text{Or } -\frac{2 \sin a \sin^2 \frac{1}{2} P}{\cos P} = (\cos l \sim d), \text{ having found the sum}$$

and difference of l and d, we can get them.

5. Let the equation be

$$f(x) = A_n X^n + A_{n-1} X^{n-1} + \ldots A_2 x^2 + A x + N = 0$$

Now $f(x)$ has necessarily a root.

Call it a, then it will be divisible by $x - a$, without a remainder.

$f(x) = (x - a) f'(x)$; the same may be said of $f'(x)$, which is a unit lower in degree than $f(x)$;

$f'(x) = (x - a_1) f''(x)$, 2 degrees lower ;

$f''(x) = (x - a_2) f'''(x)$, 3 ditto ;

This will be continued till the last function will be a simple binomial $(x - a_n)$. Then taking two or more terms of what is shown before

$f(x) = (x - a)\ f'(x)$
$f'(x) = (x - a_1) f''(x)$
$f''(x) = (x - a_2) f'''(x)$

Therefore, $f(x) = (x - a)(x - a_1)(x - a_2) \ldots (x - a_n)$.

Now in order that $f(x)$ may become zero, it is possible, provided any of these roots be equated with (x). Hence the number of roots is necessarily n, it cannot be greater than n, for then the equation will be of higher degree than the given.

JAHANGIR FRAMJI.

6. $f(x) = (x - a_1)(x - a_2)(x - a_3)(x - a_4) \ldots$

Then its limiting equation

$f_1(x) = (x - a_1)(x - a_2)(x - a_3) \ldots\ldots + (x - a_1)(x - a_2)(x - a_4) \ldots\ldots + (x - a_1)(x - a_3)(x - a_4) + \&c.$

Then by dividing we have

$$\frac{f_1(x)}{f(x)} = \frac{1}{x - a_4} + \frac{1}{x - a_3} + \frac{1}{x - a_2} + \frac{1}{x - a_1} + \&c.$$

Now in the similar manner we have

$$\frac{F_1(x)}{F(x)} = \frac{1}{x - b_4} + \frac{1}{x - b_3} + \frac{1}{x - b_2} + \frac{1}{x - b_1} + \&c.$$

Now by division we have

$$\frac{f_1(x).F(x)}{f(x).F_1(x)} = \frac{\frac{1}{x - a_4} + \frac{1}{x - a_3} + \frac{1}{x - a_2} + \frac{1}{x - a_1} + \&c.}{\frac{1}{x - b_4} + \frac{1}{x - b_3} + \frac{1}{x - b_2} + \frac{1}{x - b_1} + \&c.}$$

Now suppose $a_1 = b_1$ then by actually multiplying by $(x - a_1)$ and $(x - b_1)$ we have

$$\frac{f_1(a_1)}{f(a_1)} \cdot \frac{F(a_1)}{F_1(a_1)} = 1$$

$$\frac{f_1(a_1)}{f(a_1)} = \frac{F_1(a_1)}{F(a_1)}.$$ This is the formula.

RUSTAMJI ARDASIR.

Fig. 1.

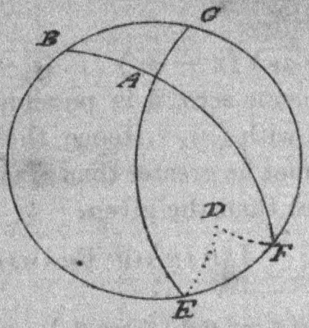


Fig. 3

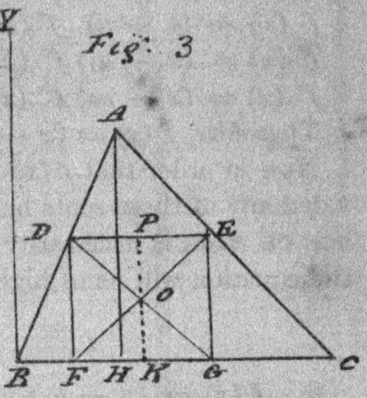


Fig. 2

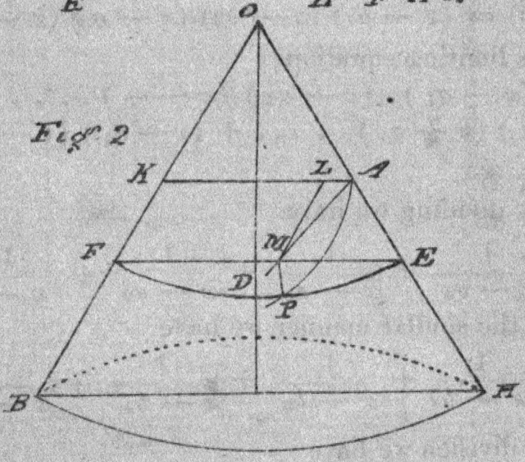
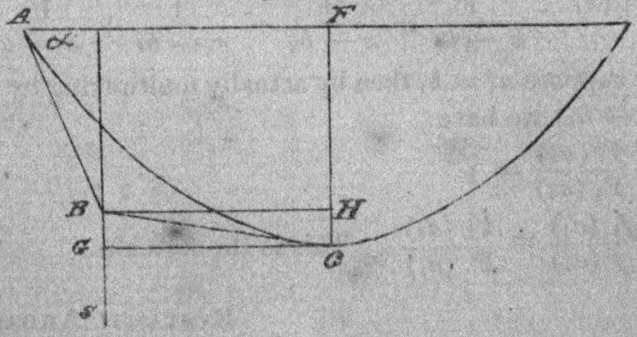


Fig. 4.



SECOND YEAR'S STUDENTS.

4. Let O B H (fig. 2) be a cone; A D an inclined section of it; E F a horizontal section; O B H a vertical section; A D, the intersection of the vertical with the inclined section, is the axis of the section; E F, the intersection of the horizontal with the vertical plane, is the diameter of the circle E P F; M P is the intersection of the horizontal with the inclined section. Now the diameter E F and the axis A M being both in the vertical plane are perpendiculars to M P. Now let A be the origin of co-ordinates; A M $= x$, M P $= y$, A O $= a$, and the angle O A D $= \alpha$, and H O B $= \beta$.

Now by the property of the circle we have

$$y^2 = \text{F M} \cdot \text{M E}; \text{ but M E} = \frac{x \sin \alpha}{\cos \frac{1}{2}\beta}, \text{ and also}$$

$$\text{F M} = \text{A K} - \text{A L}$$

$$= \frac{a \sin \beta}{\cos \frac{1}{2}\beta} - \frac{x \sin (\alpha + \beta)}{\cos \frac{1}{2}\beta}$$

$$\therefore y^2 = x \frac{\sin \alpha}{\cos \frac{1}{2}\beta} \left\{ \frac{a \sin \beta}{\cos \frac{1}{2}\beta} - \frac{x \sin (\alpha + \beta)}{\cos \frac{1}{2}\beta} \right\}$$

$$= \frac{\sin \alpha}{\cos^2 \frac{1}{2}\beta} \left\{ a \sin \beta \, x - \sin (\alpha + \beta) \, x_2 \right\}$$

This is an equation of the second order, and according as sin $(\alpha + \beta)$ is positive, nothing, or negative, the section will be an ellipse, a parabola, or a hyperbola.

5. Let A B C be a triangle, and D E G F a rectangle in it (fig. 3); take B Y and B C to be the axes, and B the origin; let B C $= b$, H A the perpendicular equal p, and H B equal c; O K equal y, and K B equal x.

$$p : b :: p - 2y : \frac{pb - 2by}{p} = \text{D E}$$

$$\text{Also } 2y : x - \frac{pb - 2by}{2p} :: p : c$$

$$\therefore 2cy = \frac{2px - pb + 2by}{2} \therefore y = \frac{2px - bp}{4c - 2b}$$

This is the equation to the locus; which being of the first degree,

belongs to a straight line. In order to find where it cuts the axis of x put $y = 0$ $\therefore 2px - pb = 0$

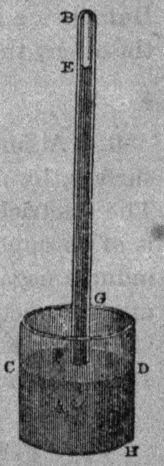
$$\therefore 2px = pb$$

$$\therefore x = \frac{b}{2}$$

GANESH DHONDEO.

6. Propositions with regard to the fluid support are—1*st*.—Any solid body immersed in a fluid displaces exactly its own bulk of the fluid, and the force with which it is buoyed up is equal to the weight of the fluid displaced ; and according as this weight is greater, equal, or less than the weight of the body, the body will be buoyed up, remain stationary in any part of the water, or will sink. 2*nd*.—Any body when sunk in water loses a portion of its weight, and that weight is equal to the weight of the fluid displaced.

7. Take a tube closed at one end, of about more than 30 inches in length, and fill it [with] mercury, so that no air might remain in any part of the tube. Close the open end with the finger, and immerse it in a cup of mercury, keeping the finger upon the end until it is below the surface of the mercury in the cup. Then take out the finger. A part of the mercury will be depressed, leaving a small vacuum at the top, which is called the Torricellian vacuum. Now the question is why does not the whole of the mercury in the tube fall ? We know that the atmosphere presses upon every part of the surface of the earth : it presses upon the mercury in the cup, which pressure acts upon the mercury in the tube, and prevents it from falling down. The height of the mercury in the tube will be about 30 inches or 29½. Now this 30 inches of mercury is balanced by the column of the atmosphere, the circumference of which column is the same as that of the tube. They are like the scales of a balance. Consequently, the mercury will fall as the pressure of the atmosphere is lessened, and rise as the pressure is increased.

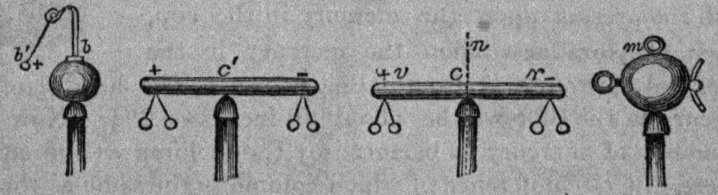


8. All magnets have two poles, which are opposite in their characters ; what the one attracts the other will repel at the same time. The forces are concentrated at the two ends of a magnet, and they are called polar forces. In the middle the forces neutralize each other, consequently the middle part of a magnet does not exert any action upon any body. When a piece of iron is brought near a magnet it is attracted. But if we were to bring a piece of wood near it it will not be attracted. How are we to explain this? In the case of the iron, the magnet has the property of inducing magnetism into it, that is, the magnetism, which was latent in the iron, becomes developed, or comes into action by coming in contact with the magnet. The two polar forces are separated at each end in the iron, and the one pole of the one attracts the opposite pole of the other. Like poles repel each other, while those that are unlike attract each other. If we were to bring a north pole of a magnet in contact with a north pole of another magnet, they will mutually repel each other. But when a north pole of the one is brought near a south pole of the other, they attract each other.

EDALJI SHAPURJI.

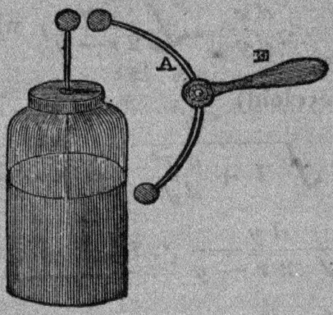
9. A surface is said to be electrified by another electrified surface, by *induction*, when the two surfaces are not in contact. The electricity which an electrified surface induces into another is of an opposite nature with its own; thus positive electricity induces negative. Induction takes place only when there is an insulator between the two surfaces.

If m be a prime-conductor of a glass machine, the end (r) of a rod which is towards the machine will be negatively electrified ;



but the farther end (v) will be positively electrified. If we touch the end (v) with a good conductor, its positive charge will pass off, and the whole rod will be negatively electrified. The Leyden

jar is an instrument constructed upon this principle to accumulate two opposite charges. It is a wide-mouthed glass jar, covered inwardly and outwardly with tin-foil, but not to the brim; the mouth is stopped by a wooden stopper, leaving a hole to let pass a metal rod through it; a chain is tied to the inner end of the rod: when the knob is in communication with the prime-conductor, electricity passes by conduction to the whole inward coating, and thus becomes positively electrified; the part of the outward coating in contact with the jar is negatively electrified, and the other side positively; but the outward side being in contact with a conductor, its positive charge is conducted off, and the whole of the outer coating is negative, while the inward coating is wholly positive. If we make a communication with the two coatings by means of a conductor (A), discharge takes place.



GANESH DHONDEO.

THIRD YEAR'S STUDENTS.

1. The arc A C B is the length of the cycloid (fig. 7), F N E is the generating circle, whose r = N O. Take A Y and A B as the axes of y and x respectively; let N be the point in the cycloid, and A G and G N are the co-ordinates of that point. Draw N D parallel to A F, calling the angle N O D = θ, then N F = $r\,\theta$. But N F = A F $\therefore$ A F = $r\,\theta$, or A G + G F = $r\,\theta$. But G F = N D = $r \sin\theta$ $\therefore$ $x + r \sin\theta = r\,\theta$ $\therefore$ $x = r\,\theta - r \sin\theta$. (1)

Again, N G = y = O F — O D = $r - r\cos\theta$. (2)

Differentiating the equations (1) and (2) respectively with respect to θ, we get $\frac{dx}{d\theta} = r - r\cos\theta$; $\frac{dy}{d\theta} = r \sin\theta$.

Divide the 1st by the 2nd, we get

$\frac{dx}{dy} = \frac{r - r\cos\theta}{r\sin\theta} = \frac{OF - OD}{ND} = \frac{y}{\sqrt{y(2r-y)}}$

$\therefore \frac{dx}{dy} = \sqrt{\frac{y}{2r-y}}$, which is the differential equation of the

(cycloid) $\frac{dx^2}{dy^2} = \frac{y}{2r-y} \cdot 1 + \frac{dx^2}{dy^2} = 1 + \frac{y}{2r-y} = \frac{2r}{2r-y}$

$\sqrt{1 + \frac{dx^2}{dy^2}}\, dy = \sqrt{2r} \cdot \frac{dy}{\sqrt{2r-y}} \therefore dS = \sqrt{2r}$

$\frac{dy}{\sqrt{2r-y}} \therefore S = \sqrt{2r} \int \frac{dy}{\sqrt{2r-y}} = -\sqrt{2r}$

$\int (2r-y)^{-\frac{1}{2}}\, dy.$

By integrating $S = -2\sqrt{2r}\,(2r-y)^{\frac{1}{2}} + C.$ (1)

When S is measured from the origin, then $S = 0$, and consequently $y = 0 \therefore 0 = -4r + c \therefore c = 4r$. By substituting the value of c in (1), $S = 4r - 2\sqrt{2r}\,(2r-y)^{\frac{1}{2}}$. When the generating circle takes the position at C then $y = 2r \therefore S = 4r$ = half the length of the cycloid $\therefore$ the whole length is $8r = 4$ diameters of the generating circle.

KAHANDAS TAPIDAS.

2. Let P be the pressure on the point A (fig. 4), S being the weight of the part of the catenary between the points A and C. C B and A B are the tangents at the points A and C, and as they meet in B, the point B is kept in equilibrium by the tensions at A and C, and the weight S of the part of the catenary. Then let C G be the perpendicular on the vertical line B S from C, and B H perpendicular on F C.

$\frac{S}{P} = \frac{\sin A\,B\,C}{\sin S\,B\,C} = \frac{\sin(A\,B\,H + H\,B\,C)}{\sin B\,C\,H} =$

$\frac{\sin A\,B\,H \cos H\,B\,C + \cos A\,B\,H \sin H\,B\,C}{\sin B\,C\,H}$; but $\cos H\,B\,C$ $=$ sin B C H, sin H B C $=$ cos B C H, and A B H $=$ $180° - a$

$\therefore \frac{S}{P} = \sin a - \cos a \tan \text{II B C}$; but $\tan \text{II B C} = \frac{dy}{dx}$

$\therefore \frac{S}{P} = \sin a - \cos a \frac{dy}{dx}$, $S = P \sin a - P \cos a \frac{dy}{dx}$

$\frac{ds}{dx} = -P \cos a \frac{d^2y}{dx^2}$; but $\frac{ds}{dx} = \sqrt{1 + \left(\frac{dy}{dx}\right)^2}$

$\therefore 1 = -\frac{P \cos a \frac{d^2y}{dx^2}}{\sqrt{1 + \left(\frac{dy}{dx}\right)^2}}$ or $2\frac{dy}{dx} = -P \cos a \frac{2\frac{dy}{dx} \cdot \frac{d^2y}{dx^2}}{\sqrt{1 + \left(\frac{dy}{dx}\right)^2}}$

$\therefore y = -P \cos a \sqrt{1 + \left(\frac{dy}{dx}\right)^2} + C \therefore (C - y)^2 =$

$P^2 \cos^2 a \left\{1 + \left(\frac{dy}{dx}\right)^2\right\} \therefore \frac{dy}{dx} = \frac{\sqrt{(C-y)^2 - P^2 \cos^2 a}}{P \cos a}$

Let $y = 0$, and $\tan a = \frac{\sin a}{\cos a}$ gives

$P \sin a = \sqrt{(C-y)^2 - P^2 \cos^2 a} \therefore P^2 (\sin^2 a + \cos^2 a) = C^2$

$\therefore C = P \therefore \frac{dy}{dx} = \frac{\sqrt{(P-y)^2 - P^2 \cos^2 a}}{P \cos a}$

$\therefore S = P \sin a - \sqrt{(P-y)^2 - P^2 \cos^2 a}$, which value does not involve any curve, shows that S is rectifiable.

3. $\cos \frac{1}{2} C = \sqrt{\frac{S(s-c)}{a\,b}}$ (fig. 5) $= \sqrt{\frac{13}{45}} = \sqrt{.2888}$ $= .5375 = \cos 57^\circ 29'$

$\therefore C = 114^\circ 58'$

$\sin A = \frac{5}{12} \sin 114^\circ 58' = \frac{5}{12} \sin 65^\circ 2' = \frac{5}{12} \times .9065535 = \frac{4.5327675}{12} = .3777306 = \sin 22^\circ 10' \therefore B =$ $180^\circ - (114^\circ 58' + 22^\circ 10') = 42^\circ 52'$. $\frac{P}{W} = \frac{\sin 67^\circ 8'}{\sin 65^\circ 2'}$

$\therefore P = 60 \frac{\sin 67^\circ 8'}{\sin 65^\circ 2'} = 60 \times \frac{.9212986}{.9065535} = 60.9$ lbs. the pressure on A, and $P' = W \frac{\sin 47^\circ 50'}{\sin 65^\circ 2'} = 60 \times \frac{.7411953}{.9065535} =$ 48.8 lbs. on B.

4. Now P_1, P_2, P_3, P_4, &c. acting on a body which is rigid, that is the same thing as that they acted on a certain point of it; for these forces, or forces parallel to them, may be made to concur in a point having the same effect on the body as these forces themselves, provided their intensities and directions are preserved, so that we can resolve them into two systems of forces, one parallel to the axis of x, and the other parallel to y, and the resultants call X and Y.

So that $X = P_1 \cos a_1 + P_2 \cos a_2 + P_3 \cos a_3 +$ &c. $Y = P_1 \cos \beta_1 + P_2 \cos \beta_2 + P_3 \cos \beta_3 +$ &c. From which $R = \sqrt{x^2 + y^2}$

a and β are the angles which the forces make with the axes of x and y.

To find the point of application of the two forces X and Y, let it be x^1 y^1. Then by the theory of moments with respect to vertical planes,

$X y^1 = y_1 P_1 \cos a_1 + y_2 P_2 \cos a_2 + y_3 P_3 \cos a_3 +$ &c.

$Y x^1 = x_1 P_1 \cos \beta_1 + x_2 P_2 \cos \beta_2 + x_3 P_3 \cos \beta_3 +$ &c.

From which y^1 and x^1 can be readily determined; but it is sufficient to find the direction of the resultant, for we can apply a force to a body at any point in the direction of that force, so that it is not essentially necessary to know the point x^1 y^1. To find, then, the direction, or a line that will be perpendicular to that direction, from any fixed point, $X = R \cos a$ and $Y = R \cos b$, a and b being the angles which R makes with the axes of x and y, so that the above equations become, by subtracting the first from the second, $R (y^1 \cos a - x^1 \cos b) = P_1 (y_1 \cos a_1 - x_1 \cos \beta_1) + P_2 (y_2 \cos a_2 - x_2 \cos \beta_2) +$ &c.

Now let R be the force, R H its direction (fig. 6). Let D E, O B, and A F be the perpendiculars on its direction from D, O, and A; but O D = A H, D O G = A H F, and G and E are right angles.

$\therefore$ G D = A F $\therefore$ B O = E G = D E — A F.

But D E = $y^1 \cos a$, and A F = $x^1 \cos \beta$

$\therefore r =$ B O = $y^1 \cos a, - x^1 \cos b$.

So P_1, P_2, P_3, perpendiculars on the forces, will be equal to $y_1 \cos a_1 - x_1 \cos \beta_1$, &c.

$\therefore R r = P_1 p_1 + P_2 p_2 + P_3 p_3 +$ &c.

So that these three equations, namely $X = \Sigma P \cos \alpha$, $Y = \Sigma P \cos \beta$ and $R\ r = \Sigma P \rho$, completely determine the resultant R; but when these are in equilibrium, $X = 0$ and $Y = 0$, and as $R = 0$ $\therefore \Sigma P \rho = 0$.

6. Let x be the breadth, and y be the depth; then as it is shown by Galileo and Lebeneitz, and proved experimentally, $x y^2$ must be the greatest, in order that the beam must be the strongest $\therefore x y^2 = \text{max.}$

By differentiating, we have $y^2 + 2 x y \frac{dy}{dx} = 0$.

Again $x^2 + y^2$ must be equal to the [square of the] diameter of the cylindrical tree, *i. e.* $x^2 + y^2 = 4 r^2$

$$\therefore 2 x + 2 y \frac{dy}{dx} = 0 \quad \therefore \frac{dy}{dx} = -\frac{x}{y}$$

Substituting this value of $\frac{dy}{dx}$ in the above equation, and dividing it by y, we have $y - \frac{2 x^2}{y} = 0$.

$\therefore y^2 - 2 x^2 = 0$; that is, $4 r^2 - x^2 - 2 x^2 = 0$, $4 r^2 = 3 x^2$

$$\therefore x = \sqrt{\frac{2 r}{3}} \text{ and } y = \sqrt{4 r^2 - \frac{4 r^2}{3}} = \sqrt{\frac{8 r^2}{3}}$$

$$= 2 r \sqrt{\frac{2}{3}}$$

These are the breadth and height of the beam required.

FURDUNJI JAMSHEDJI.

5. Let A O B be the segment of a prolate spheroid (fig. 8) resting upon the horizontal plane C D, at the point N. Draw N G normal to the curve at the point N, it will pass through the centre of gravity of the segment of the prolate spheroid, because the segment rests at the point N. Also let N M be perpendicular to O F, then M G will be sub-normal. The equation of the curve referred to the origin O is $y^2 = \frac{b^2}{a^2} (2 a x - x^2)$

By differentiating this, $y \frac{dy}{dx} = \frac{b^2}{a^2} (a - x)$

But $y \frac{dy}{dx}$ = sub-normal, therefore M G $= \frac{b^2}{a^2} (a - x)$

Fig. 5

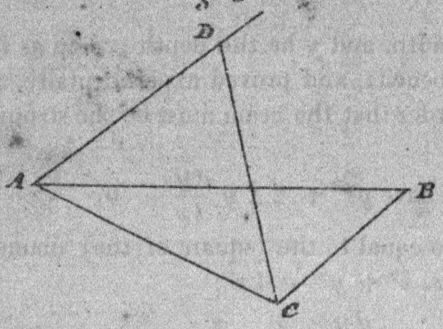


Fig. 6.

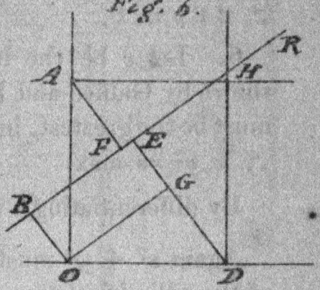


Fig. 7.

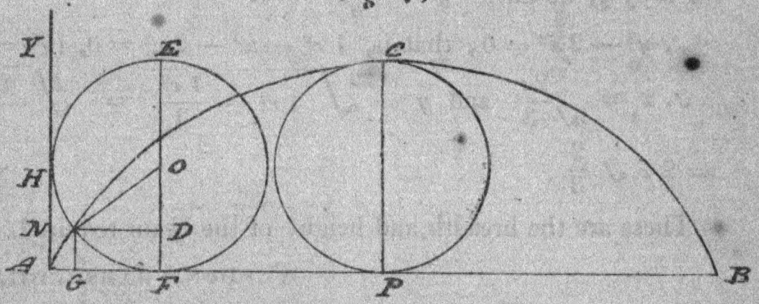
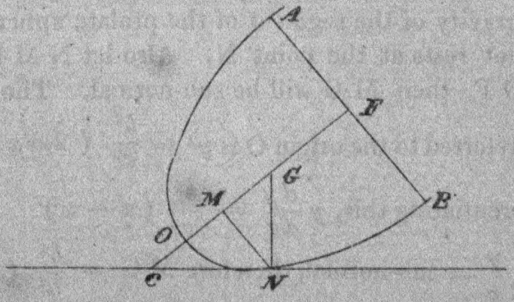


Fig. 8



Add O M or x of the point N to both sides of the equation, we get

$$O G = x + \frac{b^2}{a^2}(a - x) = x + \frac{b^2}{a} - \frac{b^2}{a^2} x = \frac{a^2 - b^2}{a^2} x + \frac{b^2}{a} .$$

Since O G, the distance of the centre of gravity of the segment from O, is $= \frac{8a - 3h}{12a - 4h} h$

$$\therefore \frac{a^2 - b^2}{a^2} x + \frac{b^2}{a} = \frac{8a - 3h}{12a - 4h} h$$

Now when N coincides with O, then the above equation will assume the form $\frac{b^2}{a} = \frac{8a - 3h}{12a - 4h} h$

$\because x$ of the point O is $= 0$. By condition $a = 2b$ or $a^2 = 4b^2$

$$\therefore b^2 = \frac{a^2}{4}$$

$$\therefore \frac{a}{4} = \frac{8a - 3h}{12a - 4h} h$$

By clearing the fraction $3a^2 - ah = 8ah - 3h^2 \therefore 3h^2 - 9ah = -3a^2$ or $h^2 - 3ah = -a^2$; $h \therefore = \frac{3}{2} a + \sqrt{\frac{9}{4} a^2 - a^2}$

$$= \frac{3}{2} a \pm \frac{a}{2} \sqrt{5} = \frac{a}{2} (3 \pm \sqrt{5})$$

$$h = \frac{a}{2} (3 - \sqrt{5})$$

This value is admissible, the other is inadmissible,

$\because h = a$ (2.5), which is greater than $2a$.

KAHANDAS TAPIDAS.

CHEMISTRY AND GEOLOGY.

SECOND YEAR'S STUDENTS.

1. The Atmospheric Pressure very much affects the boiling-point of water, by checking the formation of steam. For when the pressure is very great, steam would be required to be of a

great elasticity, in order to overcome that pressure. This has been known to occur variously. At the level of the sea, where the pressure of the superincumbent air is 15 pounds to the square inch, water boils at a temperature of 212°; but on high mountains, where the pressure is less, or in mines below the surface of the earth, where it [is] greater, water does not boil at that temperature, but a greater or less degree of heat. This circumstance is taken advantage [of] in the manufacture of sugar, which is made to boil at a low temperature by producing a vacuum. Also, by knowing the different temperatures at which water boils at different heights, these heights can be ascertained.

2. Oxygen combines with hydrogen by weight, in the proportion of 8 of the former to 1 of the latter; and by volume in the proportion of 1 of the former to ½ of the latter. The composition of water may be proved by the following process:—Water is made to boil, and steam produced, and this steam is allowed to pass through a tube, [which] contains red-hot fragments of iron, whose weight is first ascertained. When the watery steam comes in contact with iron, its oxygen is taken by the metal, which thus becomes converted into oxide, and the hydrogen, which escapes at the other extremity, may be known by applying to it a lighted taper, by which the gas becomes ignited. That the iron has absorbed oxygen from the steam may also be known by weighing it, which will show [the] addition that has been made to it. Another method of analysing water is by means of the electrolysis, by which the two gases are separated, and may be collected at the two poles.

3. Cast iron is generally impure, containing carbon, phosphorus, and other impurities, while malleable iron is not so. The former is very brittle, and so cannot be hammered, but the latter, as the very terms imply, is capable of being hammered.

4. Coal is the carbonaceous part of vegetable matters, to which they are reduced when buried in the crust of the earth, associated more or less with earthy impurities. It is found chiefly in the coal-measures, where it is accompanied with very interesting fossils. Among the principal of them are the fronds of ferns, the roots of stigmaria, the remains of fishes, some reed-like plants, &c. The carboniferous system is situated below

the magnesian limestone, and above the old red sandstone in the rocks of the Palæozoic epoch.

5. The Plutonic rocks are highly crystalline, contain no pores, no rocks like tuffa or scoria; while the Volcanic rocks, from their being projected above the ground, or under shallow [water], are not perfectly crystalline, but contain numerous pores, generated by the escape of gases, and are accompanied by tuffa, or scoria, the result of the same cause. Among the volcanic rocks are reckoned basalt, porphyry, amygdaloid, &c. and among the plutonic, granite, syenite, &c.

6. The term Fossil is applied to the relics of organic bodies found in the crust of the earth, such as actual remains of animals or vegetables; their casts, formed by some natural processes, the foot-prints of animals, or their remains, more or less altered. The most abundant fossils are of the molluscus and tastaceous kind, which are always found in the marine, as well as in the fresh-water formations, in the ancient and in the modern ones. These fossils are useful in determining the age, and the circumstance of the origin of the rocks they are found in; for by knowing the peculiar characters of these organic remains of a rock, we can very easily know to what period do those rocks in which they are found belong, and whether they are of marine or fresh-water origin.

7. When strata are inclined, their inclination, or the angle which they make with the horizon, is called their *dip*; and the line of direction at right angles to the dip, or in other words, the point of the compass towards which they dip, is their *strike*.

In a row of houses which run from east to west, their roofs dip from north to south, or *vice versâ*; but their strike is east to west. When a series of strata have been upheaved, and form a hill, the line of the ridge is the *anticlinal axis*. Suppose a continuous series of strata to be broken asunder in some part, so that any movements acting upon one may not be communicated to the other; now if one of these portions be upheaved or subsided, there is said to occur a *fault*.

PANDURANG BALIBHADRA.

THIRD YEAR'S STUDENTS.

1. Nitre is the name given to that compound of nitric acid

with potash called nitrate of potash. It is found in a natural state in some few localities, such as some parts of India, and others where the soil, when in a dry state, and not exposed to the frequent visitations of the rains, becomes covered with a kind of saline efflorescence, as is the case with some newly plastered walls. This substance is collected and dissolved in hot water, and the solution afterwards filtered, and made to crystalize. The crystals thus formed constitute nitre, procured from natural sources. It is also prepared by artificial mixture, and chemical combination and decomposition of certain substances. When a great quantity of animal refuse is mixed with old mortar or hydrate of lime and earth, and the whole arranged in large heaps under a roof, to prevent the effects of rain, but exposed to the free passage of air, and when this heap is often watered with putrid urine, and stirred up to have the inner layers communicate with the surrounding atmosphere, chemical combination and decomposition take place. Nitrate of lime and carbonate of potash are formed ; and this again being decomposed, the nitric acid of lime combines with potash, and the resulting compound is the nitrate of potash, or common nitre, which after filtering is made to crystallize, and the crystals form the substance required.

3. When one body A combines with other bodies B, C, D, &c. the proportions in which these several combine with the first are the proportions in which they combine with each other in case union takes place.

	Equivalents.
Oxygen	8
Hydrogen	1
Nitrogen	14
Carbon	6
Sulphur	16
Potassium	39

Oxygen is our body A, and it combines with any of the following substances in the series in the proportion of 8 to 1, 14, 6, 16, and 39 : then these substances, in case combination takes place between any two of them, will combine in these proportions.

4. Rocks are generally divided by geologists into four classes : —Aqueous, Metamorphic, Volcanic, and Plutonic. Aqueous are sedimentary, fossiliferous, stratified, but rarely crystalline ;

metamorphic or unfossiliferous, stratified, and half crystalline; and the volcanic and plutonic are wholly non-fossiliferous, unstratified, and wholly crystalline. The composition of the aqueous rocks which contain the first two parts is argillaceous, arenaceous, and calcareous; while the last two are constituted of the combinations of some certain simple minerals. The aqueous rocks are formed of sediments either in ocean or rivers, or inland seas and lakes, while the igneous were formed by the sudden cooling of the earth's crust, which was supposed to have been in a state of complete fusion. Hence the rocks are formed crystalline.

5. Metamorphic rocks were originally formed of the sedimentary deposits, but were changed afterwards by some subterraneous agency, and subsequently by the influence of pressure, electricity, and chemical heat, into semi-crystalline formation. Still we can find traces of the original stratification. These rocks are entirely destitute of organic remains, and contain gneiss, mica, slate, talc-slate, hornblende-slate, and some others.

6. Historic Period.	Alluvium.	
	Diluvium.	
Tertiary Period. . . .	Pleostecene.	
	Pliocene.	
	Miocene.	
	Eocene.	
Secondary Period. . .	Chalk	*Cretaceous System.*
	Gault	
	Greensand	
	Oolite	*Oolitic System.*
	Wealden ..	
	Lias	
	New red sandstone.	
Paleozoic	Magnesian limestone.	
	Coal-measures.....	*Carbonaceous System.*
	Millstone grit	
	Mountain limestone.	
	Old red sandstone.	
	Silurian rocks.	
	Grawake.	

7. The fossil remains indicate the age, the temperature, the formation, whether marine or land, of the several strata in which they are found. For instance, in the chalk formation, no land animal can be found, for it is entirely of marine origin.

Balkrishna Sadashiv.

APPENDIX F.

List of Students on the 1st of January 1853, with the subsequent Changes.

Class.	Scholarship	Stipend.	No.	Names of Students.	Remarks.
		Rs.			
5th.	1st Normal.	30	1	Narayan Bhai	Clerk in the Secretariate, Judicial Department.
			2	Pestanji Jahanghirji	Assistant Masters, Elphinstone Institution.
4th.			3	Hormazji Edalji	Assistant Masters, Elphinstone Institution.
	2nd Normal	20	1	Narayan Balal	Master, Government English School, Dhoolia.
			2	Fardunji Jamshedji	Obtained 1st Normal Scholarships.
			3	Balkrishna Sadashiva	Obtained 1st Normal Scholarships.
			4	Bhairaonath Mangesh	Obtained 1st Normal Scholarships.
			5	Jahanghir Rustamji	Master of a Portuguese School at Mazagon.
			6	Harishankar Balkrishna	Qualified for 1st Normal Scholarship.
Third.	West.	15	1	Kahandas Tapidas	Joined Fourth Year's Class.
			2	Telakchand Manekchand	Joined Fourth Year's Class.
			3	Mahadaji Vasudeva	Joined Fourth Year's Class.
			4	Naorozji Beramji	Joined Fourth Year's Class.
			5	Ganpat Madanji	Joined Fourth Year's Class.
			6	Mancherji Mervanji	Assistant Master, Elphinstone Institution.
			7	Ganesh Dhondeo	Obtained Second Normal Scholarship.
Second.			8	Edalji Shapurji	Qualified for Second Normal Scholarships.
			9	Motilal Jivandas	Qualified for Second Normal Scholarships.
			10	Pandurang Balibhadra	Qualified for Second Normal Scholarships.
			11	Parashram Vishnu	
			12	Somnarayan Nandnarayan	

SECOND.	Clare.	10	1	Harichand Antoba	Joined Third Year's Class.
			2	Nilkanth Mahadeva	
			3	Ganpatrao Bhaskarji	
			4	Moroba Sundarji	
			5	Dwarkanath Jagannath	Left the Institution.
			6	Parbhuram Navalram	Engaged in private teaching.
			7	Sorabji Rustamji	Reader in the Bombay Gazette Office.
			8	Mahiptram Ruparam	
			9	Darasha Dorabji	Joined Third Year's Class.
			10	Ramkrishna Narayan	
			11	Dadabhai Mancherji	Joined Third Year's Class.
			12	Kavazji Nasarvanji	Clerk in the Secretariate.
			13	Harichand Vittoba	Umedwar in the General Post Office.
			14	Shridhar Vithal	Obtained West Scholarship.
			15	Jagannath Narayan	
			16	Jahanghir Framji	Qualified for West Scholarships.
			17	Pandurang Hari	
			18	Mancherji Dorabji	Joined Second Year's Class.
			19	Bal Govind	Qualified for West Scholarship.
			20	Shivshankar Govindram	
			21	Ramdas Bhanji	Joined Second Year's Class.
			22	Nanabhai Haritrimbak	
			23	Bhaskar Balkrishna	
			24	Shrikrishna Narayan	Joined Second Year's Class.
FIRST.	Free Scholars.		1	Pestanji Edalji	Qualified for West Scholarships.
			2	Dadabhai Rustamji	
			3	Dinkar Ramchandra	
			4	Framji Temulji	Joined Second Year's Class.
			5	Kavarji Barjodji	
			6	Gopal Govind	Umedwar in the Collector's Kacheri, Poona.
			7	Narayan Pandurang	Umedwar General Post Office.
			8	Mahadavarao Bhaskar	
			9	Barjodji Framji	Joined Second Year's Class.

Class.	Scholarship	Stipend.	No.	Names of Students.	Remarks.
			Rs.		
First.	Free Scholars.		10	Harikisan Goverdhandas	Joined First Year's Class.
			11	Keshavarao Bhaskar.....	Joined Second Year's Class.
			12	Vishnu Raoji	Left the Institution.
			13	Mancherji Beramji	Joined Second Year's Class.
			14	Rustamji Manakji.....	Left the Institution
			15	Nanabhai Bhaskar.....	Assistant Master, Mumbadevi Branch School.
			16	Ambaram Kevalram	Qualified for West Scholarship.
			17	Jahanghir Jamshedji.....	Joined First Year's Class.
			18	Phirozsha Kavazji.....	Joined Second Year's Class.
			19	Framji Beramji	Assistant Master, Mumbadevi Branch School.
			20	Fakirji Pestanji	Joined Second Year's Class.
			21	Mahadavrao Kanoba.....	
			22	Hormazji Dadabhai	Qualified for West Scholarship.
3rd	Paying Students.		1	Vinayakrao Jagannathji	
			2	Ramchandra Ganpat.....	
2nd			3	Sakharam Govindji	Umedwar in Messrs Leckie & Co.'s.
			4	Ragunath Ganpat	Joined Third Year's Class.
			5	Nanabhai Pandurang.....	Clerk in Messrs Richmond & Co.'s.
			6	Vinayak Krishna	
			7	Ganpatrao Moroji	
First			8	Karsandas Mulji	Joined Second Year's Class.
			9	Kalkoba Kavazji	Joined First Year's Class.
			10	Rustamji Ardeshir.....	Qualified for West Scholarship.
			11	Babaji Kasinath	Joined First Year's Class.
			12	Hardiram Anupram	Joined Second Year's Class.
			13	Ganpatrao Raghoba	Umedwar in the General Post Office.

FIRST.	Paying Students.		14	Shamrao Pandurang	Joined Second Year's Class.
			15	Narayan Venkoba	Employed in a Merchant's Office.
			16	Phirozsha Meherjibhai	Joined Second Year's Class.
			17	Bamanji Bhikaji	Joined First Year's Class.
			18	Antonio L. Fernandes	Joined Second Year's Class.
			19	Dhirajlal Mathuradas	
			20	Gopinath Sadashiva	
			21	Shanteshwar Lingo.....	

CORRECTIONS.

Page (47) line 18, *for* "Geological" *read* "Zoological"

„ (57) }
„ (58) } column 2, *for* "Ordinary." *read* "Order of merit."

„ (121) line 5 from bottom, *for* "Vienna" *read* "Vienne"

„ (122) last line, *for* "RAMCHANDRA" *read* "RAMCRISHNA"

APPENDIX No. XVIII.

ANNUAL REPORT

OF THE

POONA COLLEGE,

FOR THE YEAR 1853.

ANNUAL REPORT

OF THE

POONA COLLEGE,

FOR THE

YEAR 1853.

Bombay:
PRINTED AT THE
BOMBAY EDUCATION SOCIETY'S PRESS.
1854.

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Establishment,

As on the 1st January 1854.

College.

Principal and Translator.....	Major T. Candy.
Professor of English Literature.	The Rev. A. G. Fraser.
Professor of Mathematics and Natural Philosophy.....	The Rev. J. McDougall.
Acting Assistant Professor of Vernacular Literature.....	Krishna Shastri Chiplonkar.
Assistant Professor of Natural Philosophy in the Vernacular.	Keru Lakshiman Chhatre.

Translation Department.

Translation Exhibitioner.....	Narsinh Shástrí Ok.

English Department.

Assistant Master, in charge of Branch School.....	Sakhárám Bálkrishna.

Assistant Teachers.

Govind Lakshiman.	Pándurang Bálájí.
Bálkrishna Mone.	Yadneshwar Dádájí.
Bábá Joshí Cheulkar.	Purshottam Bhat.
Wishwanáth Karmarkur.	Govind Jagannáth.
Náná Mahágáwnkar.	Náráyan Jagannáth.

Sanscrit Department.

Professor of Logic (or Nyáya Shástra).....	Narsinh Achárya Ouk.
Professor of Law (or Dharm Shástra).....	Nílkanth Shástrí Bhat.

Professor of Grammar (or Wyákaran)	Dhond Shástrí Degwekar.
Professor of Rhetoric and Poetry (or Alankár and Kávya) ..	Náráyan Shástrí Abhyankar.
Assistant Professor of Law ..	Shankar Joshí.
Assistant Professor of Grammar.	Gopál Achárya.
Sub-Assistant Professor of Rhetoric and Poetry.....	Krishna Shástrí Rájwáde.
2nd ditto ditto	Bál Shástrí Deo Tokekar.
Sub-Assistant Professor of Logic.	Gopál Shástrí Gokhle.
Sub-Assistant Professor of Grammar	Mahádeo Shástrí Garbole.

VERNACULAR DEPARTMENT.

Vernacular Teacher.....	Vishnu Pant Támankar.
Assistant ditto	Vináyak Pant Gokhle.
Kárkun.....	Anant Shástrí Tallekar.
Librarian.....	Gopál Pant Purandhare.

ANNUAL REPORT

OF THE

POONA COLLEGE,

FOR THE YEAR 1853.

I.—INTRODUCTORY AND GENERAL REMARKS.

1. I have the honour to submit to the Board of Education my Report of the Poona College for the year just closed, viz. from the 1st January to the 31st December 1853. I am happy to say that it has been a year of patient and persevering study, and that the examination with which it closed shows that the general progress of the Institution has been satisfactory. There has been little or no sickness amongst the Professors and higher Teachers; but some of the classes of the School Division have suffered from sickness amongst the Assistant Teachers. A good many students, also, have been sick at different sickly periods of the year.

2. The number of students at the close of 1852, as exhibited in my last Report, was—

In the English department.....	341	
In the Normal department.....	23	
In the Sanscrit department.....	132	
	——	496

The number at the close of 1853 was—

In the English department.....	338	
In the Normal department.....	20	
In the Sanscrit department	121	
		—— 479

The number for 1853, it will be seen, is somewhat less than that for 1852, though still rather higher than the number for 1851, which was 474. The decrease is chiefly in the Sanscrit department; but here it has not been so great as I thought it would be. The examination of candidates for admission into the College has been somewhat stricter in the past year than formerly, particularly with reference to those who wished to come without paying the fee. This has prevented our number from swelling as it would otherwise have done. Of the number above given, 68 are stipendiary students, 127 are paying students, and 282 are free, on account of poverty.

3. The details of the establishment, with returns of castes, classes, &c. will be found in the Appendix.

4. During the past year several Assistant Teachers and senior students of the English department have left the College for different situations, some of higher and some of lower value. One student has been made a Munsiff, one Assistant Teacher has become Master of an English School at Mhow, another has become Master of the Government School at Wái, and the Head Assistant Teacher, Govind Laxuman, has just been appointed Master of the Government English School at Dhárwár. Three students of the Junior College Class, and one student of the Candidate Class, or 1st Class in the School Division, competed for and obtained scholarships in the Grant Medical College in April last. A return of those who have left the College for situations in the past year will be found in the Appendix.

5. As my own personal labour in teaching is not confined to, and therefore is not included in, the report of the English department, I will briefly notice it here. I have throughout the year devoted the early morning to teaching: my classes for some months were those described in the 7th and 8th paragraphs of my last report, viz. (1) the Senior College Class, joined by the Assistant Teachers and young men from the city, and (2) the Junior College Class. These read English and Maráthí with me alternately, paying particular attention to composition and to idiom. I required from them English and Maráthí exercises weekly, the correction of which, though it involved great labour to myself, was very useful to them. With the second class, indeed, the reading of these exercises one after another in the class, and pointing out their errors, left time for little else to be done. I am happy to say that the progress of the greater part of the students in both classes, especially in Maráthí, has been very satisfactory. They are now acquiring a critical knowledge of their mother tongue. With respect to English composition, the progress of some has been very pleasing; though others still lag behind. Latterly I have had, from 8 to 9, a Class of Candidates for Translation Exhibitions, to teach which I had to abridge the time given to the other classes. Twice a week I took the Normal Class. The Sanscrit Class, which I had at the beginning of the year, I soon gave up to Assistant Professor Krishna Shástrí Chiplonkar, who can do it more justice than I could. With the commencement of the present Session I have slightly modified the arrangement of my classes. From 6 to 7 I have a combined class of Teachers and Candidates for Exhibitions, from 7 to 8 the College Class, and from 8 to 9 the Normal Class.

6. In the month of June His Highness the Raja of

Dhár visited the College, and at the same time examined the Female Schools and the School of Industry, which were assembled in the quadrangle for his inspection. His Highness was much pleased, and gave me Rs. 500 to divide between the three Institutions. The share of the College has been laid out in the purchase of class books for poor students.

7. In the same month the Honorable the President of the Board, who was in the Deccan, was so good as to preside over the meeting convened for the annual distribution of prizes. His Highness the Raja was present, and honoured the prize students by distributing the prizes to them with his own hand. The address which the Honorable President delivered to us on the occasion was subsequently translated into Maráthí by Assistant Professor Krishna Shástrí, and an edition of it was lithographed for distribution.

8. It gives me great pleasure to see, and here to bring to the notice of the Board, the interest which is felt by the Assistant Professors, and by several of the Assistant Teachers and senior students, in the Native Female Schools, in the Industrial School, and also in the Low Caste School established by the benevolent Jyoti Ráo Phule and his friends. I am very glad that these useful institutions should be associated with the College in the minds of the Native public. It gives much pleasure to the Professors and myself to countenance and aid them in every suitable way. I may here mention that towards the close of the last monsoon the College was honoured with a visit from Lord and Lady Falkland, on which occasion the Female Schools and the Industrial School were assembled in it for their inspection. The Bishop and his lady, and several distinguished visitors, met them at the College. In the month

of November the Female Schools were again assembled in the quadrangle of the College, to receive a visit from Lady Frederick Fitzclarence, who expressed herself as much interested and pleased.

9. Towards the close of the year we were favoured with a visit from a Member of the Board, Jagannáth Shankar Shet, Esq., who was accompanied by several Native gentlemen of note. Our visitors expressed themselves as well pleased with the Institution.

II.—ENGLISH DEPARTMENT.

College Division.

10. As I subjoin entire the Report of the Professor of Literature, and that of the Professor of Mathematics and Natural Philosophy, which are full of interesting details of their respective departments, I have but little to say here. The highest class of the School Division not having been deemed sufficiently advanced to be taken into the College Division, the College classes continued through 1853 the same as they were at the close of 1852. Each Professor had two classes. The highest School class, however, was taken under the personal instruction of the Professors, and thus had all the benefits of the College classes. I am happy to say that at the examination in December it was deemed worthy, with the exception of a few students who were not equal to the rest, to be admitted into the College Division. It is a most interesting class, and I look forward to its furnishing some distinguished scholars, and some able servants of the public. It has been augmented by 8 students from the 1st Class of the Branch School, who were deemed worthy to join them.

11. As the Senior College Class of last year under each Professor had dwindled down to 4 or 5 students, it will

not be long continued, I expect, in this year. The classes of the present year under the Professor of Literature are—(1) a class composed of the Teachers, and former Senior Class; (2) the Senior College Class—the late Junior Class; and (3) the Junior College Class—the late Candidate Class. Under the Professor of Mathematics they are—(1) Class of Teachers; (2) Senior College Class; (3) 2nd College Class—late Junior Class; and (4) 3rd College Class—late Candidate Class. I am particularly pleased that the body of Assistant Teachers will receive instruction from both Professors.

12. I now give the Report of the Professor of Literature :—

To Major Candy,

Principal, Poona College.

13. I have the honour to submit to you my Annual Report of the studies and progress of that department of the College which is under my care—the department of English Literature.

14. I need not remind you, that with a view both to raise the standard of qualification for admission into the College, and to raise the style of education in the College as high as it should be in the proper collegiate department, there were no new admissions into the College at the beginning of the past year, nor were the College classes advanced to a higher grade. In consequence of this arrangement we shall hereafter have three College classes, not only corresponding with as many years in point of seniority, but respectively pursuing studies proper to the first, second, and third years of a College course; and the Poona College will thus be placed on a par with similar institutions in Europe.

15. In order effectually to carry out the new arrange-

ment, my colleague and I, at your request, undertook the instruction, in our respective departments, of the Candidate, or 1st School Class. You will probably expect us, therefore, to step out of our proper jurisdiction, and to report on this School Class, which of course we shall not have occasion to do hereafter. In my department I was assisted by Narsinh Shástrí Ok, a translation exhibitioner, who instructed the class in history and geography.

16. The number of boys in this class is at present 36. Eight left us during the year. There has been a good deal of sickness among them since the rains, and 10 were absent from the examination from this cause. The course of study during the year was as follows :—

English Grammar.—Connon's ; the most philosophical work on particular grammar.

Composition.—Reid's Rudiments of English Composition. All the examples under each section were performed, either orally or in writing, in the class.

Literature.—The first session was occupied with McCulloch's Course of Reading, when the class was examined in it *ad aperturam.* At the commencement of the second session I introduced a new text-book—Chambers' Cyclopædia of English Literature, the 7th Period. They read, in Poetry, the whole of the selections from Cowper ; and in Prose the whole of the selections from the Travellers of that Period. No sentence, either in Poetry or Prose, was passed over without a careful examination, 1*st*, of every important word ; its etymology, definition, and synonyms ; and 2*nd*, of the sense of the passage, in which exercise the pupil was required to vary both the construction and the expression.

Geography.—General Geography of the Four Quarters,

and particular of Hindoostan. The Prussian system of teaching the science was adopted by Narsinh Shástrí, and efficiently carried out.

History.—Murray's History of British India, 8 chapters.

Physical Geography.—Reid's Manual of Physical Geography was the text-book; but as some important subjects are entirely omitted, and others not treated with sufficient fulness in this work, it was supplemented by chapters from Hughes' Humboldt's Cosmos, Kaemtz's Meteorology, and Lyell's Geology.

17. You will at once perceive that in history the class have not come up to the standard fixed for admission into the College; but as they had not read Murray's British India, it was thought advisable, on the principle that the history with which students should first become acquainted is that of their own country, not to put Taylor's Manuals into their hands. In literature and physical geography they have gone beyond the prescribed standard; and I am happy to say, that by the careful perusal of all the selections from the various travellers, and especially by the study of physical geography, their general knowledge has been greatly increased. The great majority of the class have made substantial progress, and will form an intelligent Freshman Class in the College.

18. I need not, perhaps, be more particular with respect to this class; I shall, therefore, proceed to report on the

College Classes.

In consequence of the arrangement already mentioned, there were but two classes in the College during the past year. I shall report on each class separately, beginning with

The Junior Class.

19. This class consists at present of 18 students. We

JUNIOR CLASS.
1.—*General Remarks.*

began the year with a much larger number, but during the year we have sent one to be a Moonsiff at Tanna, three to study medicine at the Grant Medical College, two to be School Teachers in the Mofussil, two to be Maráthí Pundits to Civilians at out-stations, two to prosecute their studies at the Elphinstone Institution, and one to be a Clerk in a Government office at Sattara. I cannot refrain, moreover, from paying a mournful tribute to the memory of one—Vénáyek Godboley, who was cut off by cholera while the examinations were in progress. He was an amiable and seriously inquiring youth, a diligent and promising student. Thus a class of 30 has gradually been reduced to 18. Further, three of this number, in the course of the year, were appointed Teachers in the English School Department, and consequently were excused from attendance on those classes which met after 1 o'clock.

20. The course of study, and the text-books used during the year, were as follows :—

2.—*Course of Study.*

English Composition.—" The Art of Composition," by G. F. Graham.

Elocution.—" Principles of Elocution," by Wm. Graham, LL.D.

Literature.—Chambers' Cyclopædia of English Literature, 7th Period.

Poetry.—Cowper ; Robert Bloomfield ; James Grahame ; George Crabbe ; Lord Byron.

Prose.—Novelists : Mrs. Shelley ; Charles Maturin ; Washington Irving ; Charles Dickens. Historians : Mitford ; Sir James McIntosh.

Belles-Lettres.—Blair's Lectures, with readings from Addison and Goldsmith.

Universal Grammar.—Sir John Stoddart's.

History.—History of Modern Europe, Taylor's Manual.

History of Civilization.—History of Civilization in Europe, by M. Guizot.

Composition and Elocution.

21. In your last report to the Board, you had occasion to say:—"The English composition of most of them (the students) is still very inferior." You might have predicated the same of their reading. It was in consequence of these deficiencies, and in accordance with your request that I should pay particular attention to these points, that I began the year with systematic instruction in composition and elocution. During the first session (January to May), in connection with the lessons in elocution, the class, divided into sections of six, delivered selected speeches, previously committed to memory, every Saturday in the hall. During the second session (June to December), in connection with the lessons in composition, every member of the class wrote an essay once a week on subjects which I prescribed. On returning these essays corrected, I generally went over the corrections of each for the benefit of the whole class. I am able to report very considerable improvement in composition on the part of a large majority of the class; some are really good writers. In reading, the improvement is not so apparent. They know how to read almost any passage correctly, but they are not convinced that good reading *per se* is an attainment worthy of a philosopher. I shall continue to take special pains with a view to their improvement in this respect.

Literature.

22. In selecting the authors to be read for lessons in literature, my choice was directed by a desire to carry on, along

with the mental, other constituent parts of education: the social, which regulates the affections and manners; and the moral, which teaches duty, in order to make us good. Cowper, Grahame, Bloomfield, and Crabbe were poets in whom rich imaginative and intellectual powers were united with unwavering principle and purity of character. They are strictly national poets. Their great characteristics are "observation and truthfulness." Their fresh and faithful pictures of English and Scottish scenery are "landscapes taken on the spot"; and what has been said of Cowper is applicable to them all:—"to walk abroad, even in the city, with Cowper in our hearts, is the next best thing to a walk in the country itself." They abound in delineations, which are "valuable as reflected pictures of English and of Scottish country life and manners," and in exquisite paintings of the domestic peace and happiness which are to be found in the greatest perfection in English and Scottish homes. They are moral poets, purifying the heart: not only as they are themselves "pure mirrors of affections, regrets, feelings, and desires which we should all wish to cherish"; but as their genius finds delight in whatsoever things are true, honest, just, pure, lovely, and of good report; while Crabbe, "nature's sternest painter, but her best," in his poetry "reads us a stern and instructive lesson, by exhibiting to us the sinfulness of sin in the certain misery of its issues, while he endeavours to lower the pride of the human heart, by showing how often its motives originate in selfishness."

23. Towards the end of the year, the class read selections from Byron, with the view of introducing them to "a prodigy of genius," and of trying the calibre of their poetical talents on the most impassioned poet of modern times.

24. The lessons in literature were conducted in the following manner:—After reading a passage, the student was required clearly to define its important words, to express the sentiment contained in it in plain colloquial language, to explain the figurative terms occurring in it, and to point out its poetical beauties: allusions to national life and manners, and instructive moral lessons, then formed the subject of free conversation.

Belles-Lettres.

25. To develope and cultivate the taste of the students, and to teach them to criticise intelligently and correctly, Blair's Lectures on Belles-Lettres, and Addison's and Goldsmith's Essays on Taste, were read simultaneously with the lessons in literature.

26. I have been greatly satisfied with the improvement of the more intelligent part of the class, consisting of about one-half of it. They evinced a discernment and a relish of the beauties of the authors they read, and a lively appreciation of the social and moral condition delineated by those authors.

History.

27. I have not been able to adopt that method of teaching history which I consider the proper one in a collegiate institution. The students were not prepared for it by their previous reading, nor had they the means of pursuing it. This two-fold want will be gradually supplied by requiring higher historical attainments for admission into the College, and by providing a historical library for the use of the class.

28. The following method was pursued in the class:—The history selected, as the most important with reference to India, was that of modern Europe. Taylor's Manual was read through, in the first instance with special reference to times and places, that the students might have the whole

map and chart of modern European history open before them; after which, much of the same ground was gone over a second time, with special reference to the nature of the historical events recorded, their connection as cause and effect, and "their foundation in the prevailing ideas of each age," and dwelling particularly on the epochs most important for the political destiny of the leading States of Europe. This latter method, which is far the most intellectual and profitable, is certainly far the most difficult; and I was not surprised, therefore, that but a small portion of the class excelled in this exercise.

History of Civilization.

29. To enable the students to form a complete idea of the facts composing the history of a system, a period, a nation—to enable them "to measure and appreciate their true value," and thus to make the study of history both more interesting and a better means of intellectual development, Guizot's History of Civilization in Europe was very carefully read, along with the revisal of the History of Modern Europe. An additional hour at the College was necessary for this purpose, the attendance at which, however, was quite voluntary. I am glad to say that all the students of history attended the class, and evinced an unusual pleasure and interest in the subject; consequently a much larger portion of the class acquitted themselves well in this study.

30. On the whole, I am far from being satisfied with the quantity or quality of the historical work of the class during the year; but I shall endeavour gradually to introduce a proper collegiate plan and method.

Universal Grammar.

31. The pure science of language formed another subject of study during the year—the science in which are laid the foundations of grammar as an art, or of every particular

grammar. The text-book was the 1st part of Sir John Stoddart's Treatise on the Philosophy of Language, forming the volume on universal grammar in the second edition of the Encyclopædia Metropolitana, a work which the oracles of literature have pronounced "the soundest and most philosophical treatise of the kind in the English language." The class read as far as the chapter "Of Verbs," and revised almost the whole they had read. The 1st chapter, containing a "Preliminary view of those faculties of the intellect and will on which the science of language depends," was studied with special care, not only because it is the proper introduction to this science, but also because it forms a suitable introduction to the more extended course of psychology on which the class is about to enter. The best minds in the class mastered this subject, and to all it proved an excellent discipline.

31. The results of the oral and paper examinations in the studies pursued by the class will be found in Appendix A.

32. The questions given out for the paper examination in the several subjects of study, with specimens of the answering, will be found in Appendix B.

I proceed now to report on

The Senior Class.

33. This class consisted of the Translation Exhibitioners and the Teachers of the English School Classes. We began the year with 14, but there were only four present at the examination. During the year four left us for very eligible appointments; three left us to study practical engineering with the Sappers and Miners, in the hope of getting employment in the Public Works Department, as soon as they would be qualified, which hope has

SENIOR CLASS.
1.—*General Remarks.*

not yet been realised; one relinquished his studies *suâ sponte;* and two were sick at the time of the examination. As the class consisted of the Exhibitioners and Teachers, who had their full quota of work in their respective departments, attendance was left voluntary. I feel it my duty, therefore, to bring to your special notice those whose thirst for knowledge led them regularly to attend and zealously to do the work of an additional class :—Mahádeo Shástrí Puránick, recently appointed Head Master of the Government English School at Kurrachee; Narsinh Shástrí Oke, Translation Exhibitioner; Bhao Paitkar, Candidate for an exhibition; and Vishwanath Karmarkar, Teacher of the 7th School Class. The two who were absent from the examination in consequence of sickness were Nana Mahagowker, Teacher of the 4th School Class, and Yedneshwar Goré, Teacher of the 6th School Class. Thus, again, a class of 14 was gradually reduced to 4.

2.—*Course of Study.*

34. The course of study, and text-books used during the year, were as follows:—

Literature.—Shakespere—The Merchant of Venice.

Moral Philosophy.—Butler's three Discourses on Human Nature, and Dissertation on the Nature of Virtue; with readings from Edwards, McIntosh, Chalmers, Morell; and Professor's Lectures on the Theories which have been proposed of the nature of Virtue and of Moral perceptions.

Science; Chemistry.—Laws and Theories.—The text-book was Professor Wilson's Manual, published in Chambers' Educational Course. The class also were provided with Turner's Chemistry, last edition, by Liebig and Gregory; with Fowne's Manual, and with several scientific Dictionaries.

Experiment, and Exposition of Phenomena.—Practical

Chemistry was studied in the Analytical Laboratory equipped with No. 2129 of Griffin's sets of Apparatus, extending to about 400 articles, ordered expressly for the class.

Elocution.—During a part of the year, this class delivered original orations in the hall every Saturday.

Literature.

35. The choice of an author to be read for lessons in literature was left to the class. They chose that author of whom Dryden said—"he needed not the spectacles of books to read nature; he looked inward and found her there." I selected the "Merchant of Venice" for their perusal, on account of "the unusual simplicity of its construction." This play in all its acts and scenes was examined with the aid of the key furnished by the most recent Shakesperian critic—Ulrici; who has "sought and found in the construction of the entire drama of Shakespere a peculiar secret of his art," relating to the central theme or ground-idea of each play. Constant reference was had in the lessons to the moral idea or theme of the play, viz. "The relation of the *letter* to the *spirit* of the law, and the various liabilities of men to dwell on the first and to neglect the last," which ground-idea is reflected and echoed over and over again, with endless variety and profit, in all the characters, expressions, and events of the piece. The class evinced a just appreciation and a lively relish of this simple and instructive drama.

Moral Philosophy.

36. In the ethical part of the course I was deeply impressed with my serious responsibility as a teacher. Since morals lie at the foundation of human happiness—since the views we entertain on moral topics will give complexion to the whole current of thought and action—he exerts a

mighty and lasting influence who fixes moral principles on the basis of truth and nature. I did not hesitate, therefore, to select that author to whom of right belongs the epithet unworthily bestowed on the apologist for tyranny—"The chancellor of human nature." Bishop Butler may almost be said to have given existence to moral science. In regard to the great foundation truths of morals, he is pronounced, by those best qualified to decide so great a question, worthy the name of a *discoverer*. In his exhibition of our social nature, and his reasonings in proof of the supremacy of conscience, he has done for moral what Bacon did for physical science—pointed out the proper method of study. I am happy to be able to report that the students were led to a high reverence for, and a diligent study of his works. Their distinct and intelligent answers, at the annual examination, to about 80 questions in the three Discourses on Human Nature, and the Dissertation on the Nature of Virtue, clearly evinced the zeal and success with which they had studied their author. After laying the foundation by a careful study of Butler, I read a course of lectures on the ancient and modern theories which have been proposed of the nature of virtue, and of moral perceptions. These lectures embraced, in ancient ethics, the views of Socrates and Plato; in modern ethics, the views of Hobbes, Paley, Bentham; Adam Smith, Lord Shaftesbury, Hutcheson, Hume, McIntosh; Clarke, Wollaston, Cudworth, Price, and Stewart.

Science; Chemistry.

37. In my last year's statement, (for it was not, properly speaking, a report,) I dwelt upon the importance of natural history as a branch of general education. I am happy to be able now to report that this study has taken its proper place in our College. As chemistry is essentially requisite

both for the explanation of natural phenomena,—these being " chemical operations on a magnificent scale, which can only be explained by chemical laws,"—and for the successful examination of the various objects which compose the mineral, vegetable, and animal kingdoms, our attention during the past year has been given to this science.

38. *Laws and Theories.*—In the former part of the year, and while waiting for some apparatus that had been ordered from England, the general principles of the science were studied with great care—especially affinity, the laws of combining proportion, the atomic theory, and the laws of gaseous volumes. The subject of heat and its chemical relations was discussed as fully as our time and means permitted. Chemical nomenclature and notation were also carefully studied.

39. *Experiment and Exposition of Phenomena.*—After the arrival of the apparatus, the *hands* as well as the *minds* of the students were employed in the analytical laboratory. The non-metallic elements and their most important compounds were thoroughly discussed. At the annual examination each student was required to give the history, distribution, methods of preparing, properties, and uses of some one of the elements, and to prepare the element, and perform the demonstrative experiments for the illustration of its properties. Their manipulation was highly satisfactory.

40. On the whole no class has given me greater satisfaction than the class in chemistry. No other study, perhaps, has done so much to create in the students a love for knowledge, which is one of the most important objects in education. I believe the study has produced still nobler results. " By the wonderful metamorphoses which it discloses—by the Protean display of physical changes which

it brings before our eyes—by the demonstration it affords of the indestructibility of matter under the agency of existing laws," it has awakened in some degree in the students "the most ennobling sentiment the mind can contemplate —the sentiment of immortality." My desire has been, and I am sure that I have not altogether failed in realizing it, that my students, in whose highest welfare I am deeply interested, should be enabled, in their measure, to adopt the truly philosophic language of the great and good Faraday :—"When I consider the multitude of associated forces which are diffused through nature; when I think of that calm and tranquil balancing of their energies which enables elements, most powerful in themselves, most destructive to the world's creatures and economy, to dwell associated together, and be made subservient to the wants of creation,—I rise from the contemplation more than ever impressed with the wisdom, the beneficence, and grandeur beyond our language to express, of the great Disposer of all!"

41. As attendance at this class was quite voluntary, no marks of answering were kept either during the session or at the public examination. I have, however, given specimens of their essays and written answers in Appendix C.

42. Allow me, in conclusion, most respectfully to make an explanation, a request, and a suggestion.

43. I may be expected, indeed, to explain why lectures in chemistry should be given by the Professor of Literature. Knowing how desirous you were that the students should be instructed in natural history, and considering it myself a branch of study the importance of which to youth cannot be over-estimated, I felt myself called on to introduce it, as I had paid particular attention to it during my undergraduate course in Edinburgh. I have stated in the body

of the report why it is necessary to lay the foundation of a course of natural history in the study of chemistry.

44. The request I have to make is, that as Dr. Haines will hereafter be a resident in Poona during six months of each year, you would endeavour to secure to our College the great advantage which it would derive from his connection with it as Professor of Chemistry and Natural History. If this most desirable object cannot be accomplished, I beg to request that I may be furnished hereafter from the Grant Medical College with the few chemical substances I require in the class-room for demonstrative experiments.

45. My suggestion has reference to the adoption of some means to secure the attendance of students, as far as possible, for at least three years at the College. It has occurred to me, that if the Board of Education would bestow a diploma on those who should graduate after a full course of three years, and after sustaining an examination in all the studies of the College, the object would be accomplished. It would be worth a student's while to go through a complete course in order to obtain such a diploma.

I have the honour to be,
Yours very faithfully,
ALEX. GARDEN FRASER.

Poona College, 13th January 1854.

46. With reference to what Professor Fraser says above, (paragraph 43,) in explanation of his giving lectures in chemistry, I feel sure that the Board will, with myself, duly appreciate the zeal, and the interest in the welfare of the students which induce him so readily to undertake extra work.

47. With reference to the Professor's request, (in paragraph 44,) I beg to say, that if the funds of the College could afford a salary for a Professor of Chemistry and

Natural History, it would be greatly to the advantage of the Institution that one should be appointed; but I regret to say, that unless the Board can grant aid from some other source, this is not the case at present. In the meanwhile I solicit permission to indent on the Grant Medical College for the chemical substances that Professor Fraser requires for his class-room.

48. I respectfully beg to recommend to the favourable consideration of the Board the suggestion of Professor Fraser respecting the granting of diplomas. The reasons for the measure are so obvious that I need not dwell on them here. I will merely say that the desired end might be attained by either of two ways: *first*, there might be a general Board of Examiners for Western India, empowered to grant diplomas to qualified students from all educational institutions, whether connected with Government or not; or, *secondly*, if it should be thought difficult to carry out this comprehensive scheme at present, it would be easy to make an interim arrangement, by which each College should be empowered to grant diplomas to its own qualified alumni. Until the University of India is prepared to issue its coveted literary distinctions of B.A., and A.M., we might supply their places by those of G.P.C. (Graduate of the Poona College), G.E.C. (Graduate of the Elphinstone College), &c. There would be no difficulty, so far as I see, in carrying out the latter scheme.

49. I now give the Report of the Professor of Mathematics and Natural Philosophy:—

Mathematical and Natural Philosophy Report.

50. If I mistake not, I mentioned in my last report that it was my intention to take the Candidate Class under my immediate superintendence. My reason for so doing

was two-fold, viz. that I would thereby have three consecutive classes to impart instruction to, and more especially that the standard for admission into the College Division might be much raised above what it had been from necessity during the two previous sessions. I am glad to say that I have been in a great measure successful. At the examination just finished the standard for admission was fixed as follows:—An accurate knowledge of the first six books of Euclid, with their application to the solution of numerous deductions, and a somewhat extended course of algebra. Thirty-six students came forward for examination; 32 were found qualified, and only four rejected. My Junior Class, therefore, during the next session, will consist of 32 students, the greater proportion of whom appear to be men not only anxious to obtain mathematical knowledge, but also in easy circumstances, which will almost ensure their remaining with us until they have completed their College course of study.

Junior College Division.

51. This class has progressed steadily in their mathematical studies. The students, after revising the work of last session, have completed a course of instruction embracing the following subjects:—geometry of planes, spherical geometry, spherical trigonometry, practical astronomy, analytical geometry of two and three dimensions, and the elements of the differential calculus. At the commencement of the year the Junior Class contained a number of very talented and industrious students. I am sorry, however, to say, that a good many were compelled from poverty during the course of the session to accept of situations much below their desert, and hence left the College with their studies far from being completed. On the whole, however, I have much reason to be satisfied with the

uniform good conduct of this class, and with the progress which it has made.

Senior Class.

52. The students of this class have read and revised nearly the whole of Young's Mechanics. I afterwards turned their attention successively to hydrostatics, hydraulics, and pneumatics, in all of which branches of natural philosophy very creditable progress has been made. The men of this class, who also are very poor, are most earnestly seeking for employment. If they can be induced to remain for some time longer, I shall endeavour to give them instruction in physical geography and civil engineering, with a view to their obtaining employment as Civil Engineers. I beg leave to send specimens of answering, and the state of the marking. The best of my students having left before the examination, the subjects embraced are not so various as they otherwise would have been.

53. Arrangements have been made by which I shall be enabled to have the Assistant Teachers one hour daily under my care. An object has thus been obtained for which I have been long anxious. The mechanical method by which arithmetic and mathematics are taught by the Assistant Masters is by no means satisfactory. It is therefore my intention to commence the Teachers' Class with DeMorgan's arithmetic and algebra, books which contain more of the philosophy of the science of numbers than any other that I know. After having made the Teachers well acquainted which the books above mentioned, I shall then proceed to give them as extensive a course of pure mathematics as their time will allow.

JAMES McDOUGALL,

Professor of Mathematics and Natural Philosophy.

Poona College, 12th January 1854.

RESULTS OF EXAMINATION.

School Division.

54. The condition of the School Classes will appear from the following statement of the result of the annual examination in December. The last class was formed in November (as several candidates had been waiting for admission for some time), and a stipendiary student from the College Division was sent to teach it till the re-arrangement of the classes at the close of the examination should set a Teacher free.

55. *12th Class.*

Teacher, a stipendiary student in rotation.

No. of Pupils on the roll		20
Present at the examination	14	
Sick	2	
Absent	4	
		20

Studies.—McCulloch's 1st Reading Book.

56. *Remarks by Examiners.*—The progress of the class is satisfactory.

57. *11th Class.*

Teacher, Purushottam Bhat.

No. on the roll		22
Present at examination	17	
Sick	2	
Leave	1	
Absent	2	
		22

Studies.—McCulloch's 1st and 2nd Reading Books, and 45 pages, or the 1st section, of the 3rd Reading Book. The principles of Grammar.

58. *Remarks.*—The reading of the class is very good, and very equable. Knowledge of the principles of grammar good.

59. *10th Class.*

Teacher, Baba Joshi Cheulkar.

No. on the roll	31

Present	29	
Sick	1	
Absent	1	
		31

Studies,—2nd Division.—McCulloch's 1st and 2nd Reading Books, and 2 sections of the 3rd Reading Book.

1st Division.—McCulloch's 1st, 2nd, and 3rd Reading Books. Reid's Grammar, 10 pages.

60. *Remarks.*—The reading of the upper division is very good: of the lower division it is generally inferior. The scholars know how to distinguish the parts of speech, but their knowledge of Reid's Grammar is only by rote.

61. *9th Class.*

Teacher, NARAYAN JAGANNATH.

No. on the roll		25
Present	20	
Sick	4	
Absent	1	
		25

Studies.—McCulloch's 3rd Reading Book, and 1st section of McCulloch's Series of Lessons. Reid's Grammar, Etymology (except the list of irregular verbs), and the general knowledge of the Rules of Syntax. Latin and Greek Roots as far as the letter G (of the Series of Lessons).

62. *Remarks.*—The reading of this class is inferior to that of some of the preceding classes. The Teacher is a very intelligent young man, but he has not been long in charge of the class. Their knowledge of grammar is pretty good, and their knowledge of roots middling.

63. *8th Class.*

Teacher, PANDURANG BALLAJI.

No. on the roll		26
Present	24	
Sick	1	
On leave	1	
		26

Studies.—McCulloch's Series of Lessons, 90 pages. Reid's

Grammar 2 parts, and commenced with the 3rd. Latin and Greek Roots as far as the letter L (of the Series of Lessons).

64. *Remarks.*—This class is very unequal. The boys at the top are very good, while the rest are very inferior. This holds with respect to their reading, grammar, &c.

65. *7th Class.*

Teacher, WISHWANATH KARMARKAR.

No. on the roll		21
Present	18	
Sick	2	
On leave	1	
		21

Studies.—McCulloch's 3rd Reading Book, 2nd and 3rd Sections. McCulloch's Series of Lessons, 127 pages. Reid's Grammar, 40 pages. Geography of Asia from Chambers' Geographical Primer. Latin and Greek Roots (Series of Lessons). Writing from Dictation.

66. *Remarks.*—This class is not so unequal as the former. The reading is pretty good; so is the grammar; so is the geography, and the knowledge of roots. The writing from dictation is very correct.

67. *6th Class.*

Teacher, YEDNESHWAR DADAJI.

No. in the Class		19
Present	15	
Sick	1	
On leave	2	
Absent	1	
		19

Studies.—Four sections of McCulloch's Series of Lessons, or 170 pages. Chambers' History of the British Empire, 40 pages. Reid's Grammar, 40 pages (Syntax finished). Reid's Geography (Four Quarters), 28 pages. Latin and Greek Roots. Writing from Dictation.

68. *Remarks.*—This class has suffered from the sickness of the Teacher. His sickness prevented his presence at the examination of it. The reading of some is very good, but that of

others at the bottom is very bad. The knowledge of roots middling; of grammar bad; dictation of some good, of the rest middling. The class is not in a very satisfactory state.

69. *5th Class.*

Teacher, GOVIND JAGANNATH.

No. in the Class		15
Present	13	
Sick	1	
On leave	1	
		15

Studies.—Four sections of McCulloch's Series of Lessons, or 170 pages. Chambers' History of the British Empire, as far as the reign of Henry VIII., 58 pages. Latin and Greek Roots, together with Prefixes and Affixes. General Geography of Asia, Europe, and Africa. Writing from Dictation.

70. *Remarks.*—This class is not in a good state. Their reading is inferior; their knowledge of meanings small; their grammar bad; their geography bad; but their knowledge of roots is very good—better than that of most of the other classes. Writing from dictation pretty good. The class has been only two months under the present Teacher; and when he got the class its best boys were moved to a higher class, so that he is not so much to blame as would seem at first. He is a very intelligent young man, and there is little doubt that at the next examination his class will appear very different.

71. *4th Class.*

Teacher, NANA MAHAGAWNKAR.

Number on the roll		35
Present	25	
Sick	2	
On leave	6	
Absent	2	
		35

Studies.—McCulloch's Course of Reading, 1st section. Chambers' History of the British Empire, 40 pages. Reid's Geography (Four Quarters of the World). Parsing. Latin Roots to

the end of the letter H. Writing from Dictation. Rules of Syntax from Reid's Grammar.

72. *Remarks.*—This is a good class. The Teacher has evidently taken great pains. He has been sick, or his class would have been still better ; but it is creditable to him. The reading is good ; knowledge of meanings good ; history very good ; roots good ; grammar very good ; geography pretty good.

73. *3rd Class.*

Teacher, BALA MONE.

No. on the roll		27
Present	24	
Sick	2	
On leave	1	
		27

Studies.—McCulloch's Course of Reading, 2nd section, 80 pages. Chambers' History of the British Empire, 100 pages. Reid's Modern Geography, 36 pages. Latin Roots (Course of Reading) as far as the letter N. Reid's Grammar, the whole, and Parsing. Writing from Dictation of the Geographical and Topographical pieces in 2 sections of the Course of Reading. English Composition. The boys can compose short sentences only.

74. *Remarks.*—This is a very good class. The reading is good ; the knowledge of meanings good ; composition of sentences creditable ; grammar good ; geography good ; dictation good. The state of the class is very creditable to the Teacher.

75. *2nd Class.*

Teacher, GOVIND LAXUMAN.

No. on the roll		33
Present	31	
On leave	1	
Absent	1	
		33

Studies.—The Course of Reading, 5 sections. Murray's India, 6 chapters. Rules of Syntax from McCulloch's Grammar. Exercises in False Grammar. Exercises in Composition. Geography of the Four Quarters of the Globe, and particularly of England and India. Latin and Greek Roots : Prefixes and Affixes from the Course of Reading. Writing from Dictation.

76. *Remarks.*—This is an interesting class. The reading of it is good, with the exception of two or three boys. The knowledge of meanings creditable ; history good ; grammar good ; geography pretty good ; roots good ; writing from dictation *very good* ; composition of sentences fair. The Teacher is a very steady man.

77. *1st or Candidate Class.*

Teacher, Professor FRASER, and NARSINH SHASTRI OK.

No. on the roll		35
Present	25	
Sick	10	
		35

Studies.—Grammar : Connon's English Grammar. Composition : Reid's Rudiments of English Composition. Geography : General Geography of the Four Quarters, and particularly of Hindustan. Physical Geography. History : Murray's History of British India, to the middle of the 8th chapter. Literature : McCulloch's Course of Reading ; Chambers' Cyclopædia, 7th Period.

78. *Remarks.*—This class underwent a searching examination for a day and a half. With the exception of a few students, the class acquitted itself well in every branch of study in which it was examined. Excepting those few, all are deemed fit for admission into the College Division.

ARITHMETICAL CLASSES.

79. *8th Class.*

Teacher, NARAYAN JAGANNATH.

No. on the roll		33
Present	18	
Sick	3	
On leave	5	
Absent	7	
		33

Studies.—From Numeration to Compound Division.

80. *Remarks.*—Pupils answered very creditably for the time they have been employed.

81. *7th Class.*

Teacher, YEDNESHWAR DADAJI GORE.

No. on the roll		27
Present	14	
Sick	3	
On leave	3	
Absent	7	
		27

Studies.—Simple Addition, Subtraction, Multiplication, Division. Compound Addition, Subtraction, Multiplication, and Division. Reduction. Simple Rule of Three.

82. *Remarks.*—The Teacher has been sick for nearly two months, and the class in consequence very irregular. The appearace of it is much better than was expected.

83. *6th Class.*

Teacher, BALA MONE.

No. on the roll		13
Present	11	
On leave	2	
		13

Studies.—From Numeration to the end of Decimal Fractions, from Dr. Grey's Arithmetic.

84. *Remarks.*—This class has been exceedingly well taught, and consequently the pupils are well up. The Teacher must have been very industrious.

85. *5th Class.*

Teacher, NANA MAHAGAWNKAR.

No. on the roll		29
Present	16	
Sick	3	
Absent	4	
On leave	6	
		29

Studies.—From Rule of Three to the Extraction of Square Roots.

86. *Remarks.*—The Teacher of this class also has been long absent from sickness. The class, however, made a very respectable appearance.

87. *4th Class.*

Teacher, GOVIND JAGANNATH.

No. on the roll.....		16
Present.....	14	
Absent.....	2	
		16

Studies.—From Simple Interest to the end of Joyce's Arithmetic. Algebra as far as Simple Equations of one unknown quantity.

88. *Remarks.*—This class is on the whole respectable. It appears somewhat to disadvantage in consequence of a change of Teachers.

89. *3rd Class.*

Teacher, PURUSHOTTAM BHAT.

No. on the roll.....		19
Present.....	15	
Sick.....	4	
		19

Studies.—Simple Interest, Discount, Compound Interest and Annuities from Joyce's Arithmetic. Young's Algebra, as far as Simple Equations of one unknown quantity.

90. *Remarks.*—The pupils in this class are very intelligent, and some really clever. Their algebra is particularly good.

91. *2nd Class.*

Teacher, GOVIND LAXUMAN.

No. in the Class.....		24
Present.....	21	
Sick.....	2	
On leave.....	1	
		24

Studies.—Arithmetic: Fellowship, Compound Interest, Discount, &c. Algebra as far as Simple Equations with Surds. Plane Geometry: three books of Euclid.

92. *Remarks.*—Propositions of the first three books of Euclid very well demonstrated, and equations equally well solved by half the class. The other half not nearly so well up. On the whole the state of the class reflects much credit on the industry and talents of the Teacher.

93. *1st or Candidate Class.*

Teacher, Professor McDOUGALL.

No. on the roll..... 34
Present..... 24

Studies.—Geometry: First six books of Euclid. Algebra as far as Quadratic Equations.

94. *Remarks.*—The class underwent a thorough examination, and the students acquitted themselves well. With a few exceptions all are worthy of admission into the College Division.

III.—VERNACULAR DEPARTMENT.

95. I am happy to say that this important department has been in an efficient state through the past year, and that the progress has been satisfactory. The department reflects credit on Krishna Shástrí, the Acting Assistant Professor of Vernacular Literature, and on Assistant Professor Keru Laxuman, who have the general direction of it under my superintendence, and also on Vishnu Pant, Vináyak Pant, and their subordinates.

96. I here beg to recommend that Krishna Shástrí, the Acting Assistant Professor of Vernacular Literature, may be confirmed in his appointment from the 1st of this month.

97. I solicit that the gratuity of two rupees a month each to the two monitors employed in this department, according to paragraph 113 of my last report, may be sanctioned for the past year.

98. In the session which has just opened, I have relieved the Assistant Teachers of the English department from teaching in this, as teaching for seven hours a day seemed to be too much, and left them insufficient time to prepare for their classes, or to attend to their own improvement. I have supplied their places by the senior students of the Normal department, to whom it is a suitable introduction to their own particular work.

99. The book of "Poetical Extracts," mentioned in paragraph 110 of my last report, was finished and put to press in the course of the year. It is still in the press.

100. As the reports of the Assistant Professors in this department are minute, they render further remarks from me unnecessary. I first subjoin the report of Acting Assistant Professor Krishna Shástrí.

REPORT ON THE PROGRESS IN THE VERNACULAR DEPARTMENT.

101. This department consists of two branches, the one comprising all the translation classes, and the other all the purely vernacular ones. The translation classes in the School Division are six in number. I have taken under my own tuition the 1st Class, and exercise a general superintendence over the rest. The books that are read in these classes are the same as those the students read in their respective English literary classes, except Clift's Political Economy, which I have read in the 1st Class. This arrangement, though it does not increase the amount of the knowledge of the students, confers, perhaps, a more solid advantage on them; namely, it enables them to understand more correctly and clearly what they have already read. For it is an indisputable truth that the learners of a foreign language for a considerable time comprehend it through the medium of their mother tongue, so that their understanding any work in that language cannot be better tested than by making them express the contents of the same in their own native tongue. Thus boys in these classes may be said to some extent to revise what they have already read, and the multiplicity of lessons, which is so very justly considered as injurious to the real interest of the learners, is avoided.

102. In the lower classes the students are required to translate first literally, and then into idiomatic Maráthí;

there the chief object being to make them comprehend the full meaning and power of words; while in the higher classes the literal version is not so much insisted upon, but the pupils are allowed to give at once an idiomatic rendering, and their attention is particularly drawn to the difference of the genius and idioms of the two languages, and also to the points of similarity that sometimes exist between them.

103. The present state of the classes, and the amount of the progress which the students in them have made during the session in this branch, will be easily ascertained by looking at the results given in the sequel of the examination of them.

Vernacular Classes.

104. It is imperative on every student, whether he attends to English or to Sanscrit as his principal study, to acquire a good critical knowledge of his own mother tongue; and consequently he is required to devote some portion of time and attention to the study of that language. Here he goes through a course of instruction calculated to afford him facilities in prosecuting his English or Sanscrit studies with advantage, as well as to expand and train his mind, and furnish it with a good deal of useful information on several subjects. He is taught here to read properly, to give a full explanation of what he reads, and to write correctly, in a plain hand, what is dictated to him. He is likewise taught grammar, parsing, history, geography, arithmetic, algebra, geometry as far as Hutton's propositions, and Nagdi Mulki or Kacheri accounts, and in the higher classes he receives lectures in popular physics and on the principles of political economy, and is required sometimes to produce essays on given subjects.

105. After admission into the institution, the students do not attend any of the translation classes till they have

gone through one or two sections of the Series of Lessons, but during the time when the translation classes are held, they are made to join some arithmetical or geometrical class in the vernacular, suitable to their previous acquirements in those branches. By the time they come into a condition to pursue those studies in English, that is, when they have gone through about half the Series of Lessons, they are admitted into a translation class, and leave the arithmetical one in the vernacular. By this arrangement the pupils are enabled to preserve and to increase the arithmetical knowledge with which they enter the College.

106. The books that are taught in this department are for the most part the versions of some good English works. There is at present a scarcity of good books in the vernacular language; but this great obstacle to the promotion of general education, I am happy to say, is gradually being removed by the commendable and benevolent efforts made in many quarters. We have four valuable publications from the Dakshina Prize Committee, and some from the Deccan Vernacular Translation Society, and I am sure that we will have three or four more from them this year. The results of the examination that are given under in full detail will clearly show that the classes in this department are in a satisfactory condition, and that the teachers and the taught have creditably acquitted themselves before the examiners. In conclusion, I am happy to make a particular observation that the introduction of Nagdi Mulki into our College has proved very successful. The greater part of the students who went to pass an examination for Kárkunships have come off with credit, and got good certificates.

KRISHNA SHASTRI,
Acting Assist. Professor of Vernacular Literature.

107. I now subjoin the report of Assistant Professor Keru Luximon on the arithmetic and mathematics of the Vernacular.

REPORT OF THE STUDIES AND PROGRESS OF THE VERNACULAR MATHEMATICAL DEPARTMENT.

108. During the preceding session there were thirteen classes under my superintendence. Of these four were learning arithmetic; three were learning algebra and geometry; two were learning Nagdi Mulki or Katcheri accounts; two were receiving lectures on popular physics; and the remaining two were receiving instructions in the higher branches of mathematics. The progress made by each of the classes during the past session will be shown by the report of the examination.

109. I was assisted in this department by four Assistants, namely, Vishnu Pant Támhankar, Head Master; Vináyak Pant Gokhle, Assistant Master; and two students from the Sanscrit department.

110. Seeing that different classes had to learn different subjects at different times, I have been obliged to divide them into the following four divisions:—

1*st*.—Arithmetical and mathematical classes for students from the English department.

2*nd*.—Arithmetical and mathematical classes for students from the Sanscrit department.

3*rd*.—Classes which received lectures on popular physics.

4*th*.—Nagdi Mulki classes.

111. *Arithmetical and Mathematical Classes*.—Every student in the English department is obliged to come for two hours in the morning for vernacular studies. The arithmetical and mathematical classes of students from the English department (1st Division) were therefore first attended to. The students were divided into three classes: the

highest, in which algebra and geometry were taught, was given to Vishnu Pant Támhankar; the lower two classes, in which arithmetic was taught, were given to the two students who came as teachers from the Sanscrit department. I inspected these classes occasionally myself, and exercised a general superintendence over them.

112. The vernacular time for the Sanscrit department is the afternoon. Last year we had four classes for students from this department. The 1st learned under Vishnu Pant algebra and geometry; the 2nd, algebra under Vináyak Pant; the students of the 3rd class were learning vulgar and decimal fractions, under Vináyak Pant; and the subject of study of the 4th class was integral arithmetic, under Vináyak Pitkar, a scholar from the highest Sanscrit class. I examined these classes occasionally, and also exercised a general superintendence over them.

113. From my occasional examinations of these classes, I find that the two highest classes are going on satisfactorily, but the 4th class, composed as it is of boys generally below 9 or 8 years of age, could not be said to have done much, during the whole of the preceding session. This is owing much, perhaps, to their under age and irregular attendance, both of which are at present irremediable.

114. The Sanscrit students who are included in these classes attend to their Sanscrit studies in the morning.

115. *Popular Physics.*—During the last session, two classes received lectures from me on popular physics. I took them separately on alternate days, so that each class had three lectures every week. On the three alternate remaining days of the week, they were obliged to prosecute their other vernacular studies, namely correct writing, grammar, and history, under Gopál Shástrí.

116. The Junior Class receives lectures from me on

optics and astronomy. In giving them explanations on lenses, microscopes, telescopes, &c. I would have found some difficulty in making them understand me in every particular, had there been no philosophical apparatus in the College. But a large and fine microscope, also accompanied by an adjustment which rendered it a solar microscope, an acromatic three-feet telescope, and a large magic lantern, which the College possessed, removed this difficulty in every way, and I was enabled to show them some wonders in optics. A white ray of light dissected into seven different colours; a flea magnified to 1,000 times its size; a distant hill brought within a few feet of the observer, are no small wonders in the eyes of either an educated or an uneducated person. An orrery, accompanied with adjustments, to show the diurnal revolution of the earth, the formation of the seasons, the uncqual lengths of the days and nights in different parts of the year, the phases of the moon, &c. was of great service to me during my lectures on those subjects. By means of a large telescope students had an opportunity of seeing, with their own eyes, the real forms of Jupiter, Saturn, Mars, and Venus, the mountains on the Moon, and the dark spots on the body of the Sun. On the whole, the students had very amusing, and at the same time instructive lectures this year.

117. The 1st Class have passed through the greater part of practical astronomy. They have learnt the use of the globes, and thus know how to explain why the sun does not rise and set always in the same places; why the days are not of the same length throughout the year; why at some places near the poles there are days of 2, 3, or more months' duration. They now saw that it was possible to have at one place sun rising, at another sunset, at the third noon, and at the fourth midnight, at the same time.

These things they could not be made to comprehend before. I gave them a short lecture, one day, on the construction of calendars. I have also explained to them the reason why a month is sometimes intercalated, and sometimes dropped in the Hindoo calendars. They also now know when these changes may be expected. I have also explained to them how, by means of a few tables, a Hindoo date may be converted into a European, and *vice versâ*. A little before the end of the session I taught them a few of the problems on right angled triangles, and how to work these by means of logarithmic tables.

118. *Nagdi Mulki.*—Of the two classes in this department, the higher is taught by Vináyak Pant and the lower by Vishnu Pant. A class had finished their studies in this branch a few months ago under Vishnu Pant; and the present class under him is now made up of newly admitted scholars. Before admitting a new student who wishes to learn Nagdi Mulki, I see that he has the following qualifications:—A good Modi writing; a good knowledge of arithmetic; and a general knowledge of grammar, geography, and the history of his native country.

119. A student who goes through all the items of Nagdi Mulki, and understands them well, is supposed to have acquired a general knowledge of the duties of *Talúthi*, *Kulkarni*, *Mahálkari*, *Mámlatdar*, and other Government functionaries, European and Native, in the Revenue Department. He knows the duties and powers of a Village Kárkun and Zilha Collector. He knows how many and what kinds of registers are kept by these different functionaries.

120. In July last, when the Government Examiners of different Zilhas examined the *Umedwárs* for Government Kárkunships, in their respective localities, 17 students from our College presented themselves before the Poona

Examiners, and eight of them passed before them, and received certificates of proficiency in this branch. Here are the names of the successful candidates :—

Pándu Reḍe.	Wássudeo Velankar.
Wáman Gadre.	Vináyak Pitkar.
Bálá Apte.	Bálshástrí Ghánekar.
Bálá Lokhanḍe.	Vitu Lele.

121. Of these Pándu Reḍe is a student in the Normal Class, and the others are from the English and Sanscrit departments.

122. The whole of the Normal Class receive instructions in Nagdi Mulki from Vishnu Pant, one day every week, this being the longest time they could spare for these instructions from their other studies.

123. In a conversation that I had with Maháḍeo Shástrí, Superintendent of Government Schools 1st Division, a few days ago, he said that the Government Examiners found that the answers of the Umedwárs who had School certificates were always far better than those who came without them. He also said that the rates of the successful Umedwárs with School certificates, to those who were successful, but who were without School certificates, was as 3 to 2. This is very favourable to the Government Schools, and I would advise the Board to introduce Nagdi Mulki at once into their Vernacular Schools.

124. *Chemistry.*—The Students of the Junior College Class attended my lectures on chemistry, and other subjects akin to it. As the chemical apparatus of the College is very defective, I could not at first accompany my lectures with suitable experiments. This, however, is now remedied by Professor Fraser having ordered at his own expense complete chemical apparatus from England for the use of the students.

125. The subjects of my lectures in the preceding session were as follows: electricity; electrolysis; electro-metallurgy; constitution of the atmosphere; on the production, composition, and manufacture of *gutta percha;* on steam and the steam-engine; vegetable chemistry; on the nature and production of the different vegetable products, namely, sugar, starch, wax, &c.; on the elements of composition; uses of different manures; on the production of ammonia and carbonic acid, and their uses to the vegetable kingdom.

126. Since the arrival of Professor Fraser's apparatus, I have allowed the students to perform some experiments occasionally with their own hands, while I superintended the operations, so that by these means they have had an opportunity not only of acquiring a knowledge of the properties and uses of different chemical substances, but but also of getting accustomed to handling those delicate instruments required in the various operations of chemistry.

KERU LAKSHMAN CHHATRE,
Assistant Professor of Natural Philosophy.

127. The following is a statement of the result of the examination of the Vernacular department:—

CLASSES OF READING, &C. OF STUDENTS OF THE ENGLISH DEPARTMENT.

128. *7th Class.*

Teacher, A Normal Scholar in rotation.

No. on the roll		32
Present	25	
On leave	3	
Sick	2	
Absent	2	
		—— 32

Studies.—Æsop's Fables. Elements of Grammar. Correct Writing.

129. *Remarks.*—The greater part read well; two or three are indifferent readers. The grammar good of most; dictation fair.

130. *6th Class.*

Teacher, A Normal Scholar in rotation.

No. on the roll		46
Present	39	
Sick	4	
Absent	3	
		46

Studies.—Æsop's Fables. Parsing and correct Writing.

131. *Remarks.*—There are some excellent readers in this class, and two or three bad ones. Most read *well;* grammar fair. The class is a good one.

5th Class.

132. *Teacher,* VINAYAK PANT GOKHLE.

No. on the roll		34
Present	28	
Sick	3	
On leave	3	
		34

Studies.—Æsop's Fables, the whole. Parsing and correct Writing. Catechism of the History of the Maráthás.

133. *Remarks.*—Reading very good of most; grammar good; dictation good; history fair. The class is in a satisfactory state.

134. *4th Class.*

Teacher, BABA JOSHI.

No. on the roll		32
Present	23	
Sick	4	
On leave	4	
Absent	1	
		32

Studies.—Revision of the first 8 chapters of the History of the Maráthás, 1st volume. Parsing and correct Writing.

135. *Remarks.*—Reading very good; parsing good; history very good of the upper part of the class, but bad of the lower part. With this exception, the class is in a very satisfactory state. Dictation good.

136. *4th Class.*

Teacher, Sub-Assistant Professor GOPAL SHASTRI GOKHLE.

No. on the roll		24
Present	16	
On leave	3	
Sick	2	
Absent	3	
		24

Studies.—History. Grammar. Dictation.

NOTE.—This class studied the above subjects under Gopál Shástrí, and popular physics under Assistant Professor Keru Lakshiman on alternate days.

137. *Remarks.*—Reading very good. The class passed a satisfactory examination.

138. *3rd Class.*

Teacher, NARSINH SHASTRI OK, Translation Exhibitioner.

No. on the roll		34
Present	28	
Sick	1	
On leave	5	
Absent	...	
		34

Studies.—The first 7 chapters of the History of the Maráthás, 2nd volume. The Rules for the combination of words from Dádobá's Grammar. Parsing and correct Writing.

139. *Remarks.*—Reading very good; parsing of most good; dictation good; knowledge of rules of combination good; knowledge of history good. The class is in a very satisfactory state.

140. *2nd Class.*

Teacher, MAHADEO SHASTRI, Translation Exhibitioner.

No. on the roll		30
Present	24	
Sick	3	
On leave	2	
Absent	1	
		30

Studies.—Ten chapters of Bál Shástrí's British India, from

the 5th chapter. Revision of the first 5 chapters. Parsing and correct Writing.

141. *Remarks.*—This is a good class. Reading of most good; writing from dictation *excellent;* grammar fair; history fair.

142. *1st Class.*

Teacher, Assistant Professor KRISHNA SHASTRI.

No. on the roll		21
Present	17	
Sick	2	
On leave	1	
Absent	1	
		21

Studies.—History of England, from the 13th chapter to the end. Parsing and correct Writing. Some lessons in the Elements of Political Economy.

143. *Remarks.*—This is a very good class. Reading good; writing from dictation good; grammar good; history good; answers in political economy good.

TRANSLATION CLASSES OF STUDENTS OF THE ENGLISH DEPARTMENT.

144. *6th Class.*

Teacher, BABA JOSHI.

No. on the roll		28
Present	19	
Sick	3	
On leave	1	
Absent	5	
		28

Studies.—The first 2 sections of the 3rd Reading Book.

145. *Remarks.*—The progress of this class is creditable.

146. *5th Class.*

Teacher, PANDURANG BALAJI.

No. on the roll		30
Present	21	
Sick	4	
On leave	2	
Absent	3	
		30

Studies.—The first 100 pages of the Series of Lessons.

147. *Remarks.*—This class also did creditably.

148. *4th Class.*

Teacher, WISHWANATH KARMARKAR.

No. on the roll		28
Present	20	
Sick	5	
On leave	2	
Absent	1	
		28

Studies.—The first 3 sections of the Series of Lessons.

149. *Remarks.*—This class made several mistakes, but on the whole it is creditable.

150. *3rd Class.*

Teacher, NARSINH SHASTRI OK, Translation Exhibitioner.

No. on the roll		29
Present	25	
On leave	2	
Absent	2	
Sick	1	
		29

Studies.—The 1st, 4th, and 5th sections of the Series of Lessons.

151. *Remarks.*—This is a nice class, and gave much satisfaction.

152. *2nd Class.*

Teacher, MAHADEO SHASTRI PURANIK, Translation Exhibitioner.

No. on the roll		32
Present	29	
On leave	2	
Sick	..	
Absent	1	
		32

Studies.—The last 2 sections of the Series of Lessons, and the first 3 sections of the same revised, excepting the Poetical Pieces.

153. *Remarks.*—This is a good and interesting class. The examination was satisfactory.

154. *1st Class.*

Teacher, Assistant Professor KRISHNA SHASTRI.

No. on the roll		29
Present	20	
Sick	7	
On leave	1	
Absent	1	
		29

Studies.—Five chapters of Clift's Political Economy. The Scientific, Geographical, and Topographical Pieces of the Course of Reading.

155. *Remarks.*—This is a very interesting class. The students are making good progress.

VERNACULAR READING CLASSES OF STUDENTS FROM THE SANSCRIT DEPARTMENT.

156. *2nd Class.*

Teacher, BAL SHASTRI GHANEKAR, Sanscrit Student.

No. on the roll		16
Present	15	
Absent	1	
		16

Studies.—Æsop's Fables. A little Grammar.

157. *Remarks.*—The reading of a few is good; of a few middling; of the rest bad. The class is irregular.

158. *1st Class.*

Teacher, VISHNU PANT TAMANKAR.

No. on the roll		17
Present	14	
Sick	1	
Absent	2	
		17

Studies.—Five chapters (from the 6th) of the History of the Maráthás, Vol. I. General Geography of the Four Quarters. Bál Mitra, 2nd volume. Correct Writing. Parsing.

159. *Remarks.*—This is a good and satisfactory class. The reading is good; dictation good; grammar good; and geography good. The class is well taught.

CLASSES OF ARITHMETIC, MATHEMATICS, AND GEOGRAPHY.

(I.) Students from the English Department.

160. *3rd Class.*

Teacher, BAL SHASTRI GHANEKAR, Sanscrit Student.

No. on the roll		50
Present	36	
Sick	5	
Absent	9	
		50

Studies.—Integral Arithmetic. Map of Asia.

161. *Remarks.*—Arithmetic good; geography middling.

162. *2nd Class.*

Teacher, VINAYAK SHASTRI PITKAR, Sanscrit Student.

No. on the roll		24
Present	17	

Studies.—The whole of Fractional Arithmetic. Maps of Asia and Europe.

163. *Remarks.*—Arithmetic very fair; geography pretty good.

164. *1st Class.*

Teacher, VISHNU PANT TAMANKAR.

No. on the roll		20
Present	18	
Sick	1	
Absent	1	
		20

Studies.—The first book of Euclid. Algebra as far as Simple Equations. General Geography of the Four Quarters.

165. *Remarks.* Arithmetic good; geography middling.

(II.) Students from the Sanscrit Department.

166. *4th Class.*

Teacher, VINAYAK SHASTRI PITKAR.

No. on the roll		21
Present	14	
Sick	1	
Absent	6	
		21

Studies.—Integral Arithmetic.

167.—*Remarks.*—A few did well. The rest made a poor appearance. The students are very young.

168. *3rd Class.*

Teacher, VINAYAK PANT GOKHLE.

No. on the roll 5
Present 4
Sick 1
—— 5

Studies.—Vulgar and Decimal Fractions.

169. *Remarks.*—One student did very well. The rest are inferior.

170. *2nd Class.*

Teacher, VINAYAK PANT GOKHLE.

No. on the roll..... 5
Present 5
—— 5

Studies.—Algebra as far as Simple Equations.

171. *Remarks.*—This class did very well.

172. *1st Class.*

Teacher, VISHNU PANT TAMANKAR.

No. on the roll 10
Present 9
Sick 1
—— 10

Studies.—Algebra from Surds to Quadratic Equations. Sixty-five Propositions from Hutton.

173. *Remarks.*—The majority of the students of this class are very intelligent, and did very well. One or two at the bottom did ill.

CLASSES OF NAGDI MULKI OR KACHERI ACCOUNTS.
Students some from the English Department, and some from the Sanscrit Department.

174. *2nd Class.*

Teacher, VINAYAK PANT GOKHLE.

No. on the roll..... 7
Present 7
—— 7

Studies.—The Táluke Wahi.

175. *Remarks.*—Progress good.

176. *1st Class.*

Teacher, VISHNU PANT TAMANKAR.

No. on the roll		21
Present	14	
Absent	7	
		21

Studies.—Shetwar Patrak and Kird, from Mauji Wahi.

177. *Remarks.*—The class passed a very good examination.

CLASSES OF POPULAR PHYSICS.

178. *2nd Class.*

Teacher, Assistant Professor KERU LAKSHIMAN.

No. on the roll		26
Present	20	
Sick	2	
Absent	4	
		26

Studies.—Elements of Optics and Astronomy.

179. *Remarks.*—The students in general answered very well. The class has been well taught.

180. *1st Class.*

Teacher, Assistant Professor KERU LAKSHIMAN.

No. on the roll		11
Present	8	
Sick	2	
On leave	1	
		11

Studies.—Elements of Astronomy. Use of the Globes. Conversion of European into Hindu time. Trigonometry as far as Right-angled Triangles. Use of Logarithms.

181. *Remarks.*—This class did not answer so well as the former. The students have not paid sufficient attention.

IV.—NORMAL DEPARTMENT.

182. I am happy to say that this important department has been in an efficient condition through the year.

Both Teachers and students have been diligent. The reports of the Assistant Professors, which I give below, render extended remarks from me unnecessary.

183. The Senior Class in English continues to be taught by Assistant Professor Krishna Shástrí. The Junior Class was taught by Bháu Joshí T,heurkar till he was appointed Master of the School at Wái. On his leaving, I put Mahádeo Shástrí Puránik, Translation Exhibitioner, in charge of it, and now, as he has gone to Kurrachee, the class is in charge of Narsinh Shástrí, another Translation Exhibitioner. I had the Normal students twice a week through the past year: now I have arranged to have them an hour *every day*.

184. One of the Normal students has been appointed Master of the School at Pandharpur. There are two or three others ready for appointments as Masters, and two or three more who might very advantageously be sent to be Assistant Masters in large Schools. One student whose health failed him resigned, and was sent to be Assistant Master in the School at Náshik, where I doubt not he is found very useful. Towards the close of the session the two vacancies were filled up, so that the number is now full. The Umedwárs that attended the Junior Class in 1852 have not attended in the past year. They were so inferior to the other Students that I recommended their ceasing to attend.

185. The Normal scholars have had charge by rotation of classes in the Vernacular department through the past year. Since the new session commenced, I have made still more use of them in that department, as I have already mentioned.

186. The following are the reports of the Assistant Professors in this department:—

Report on the Progress of the Students in the Normal Department for the Year 1853.

187. At the commencement of this Session there were twenty students in this department. But some months ago a scholar named Ráwjí Náshikkar, on account of the climate of this place not agreeing with his constitution, had become unable to prosecute his studies with advantage, and in the mean time a place of an Assistant Master being vacant in the Vernacular School at Náshik, his native town, it was conferred upon him by the Superintendent of the Vernacular Schools 1st Division, and he left the College. Another scholar, named Sítárám Shástrí Maráthá, who was in the senior mathematical and English divisions, has lately been appointed School Master at Pandharpur. Thus at the examination we had only eighteen pupils in the department.

188. The subjects the students learned this session have been English, Sanscrit, mathematics, astronomy, political economy, Nagdi Mulkí, and geography. For the English study the scholars are arranged into two divisions; the 1st Division was under my tuition, and the other was given to Mahádew Shástrí Puránik, one of the Translation Exhibitioners, who has been lately appointed the Head Master in the English School at Kurrachee.

189. I have read with the pupils in the 1st Division the whole of the Course of Reading, excepting the poetical pieces, and the first 110 pages of Chambers' Exemplary Biography. A good deal of information which the pupils have already got in the elementary subjects of natural philosophy and chemistry from my colleague Keru Lakshiman, has helped them to a great extent in understanding the scientific pieces in the elementary reading.

190. The Exemplary Biography was introduced with the object of acquainting the pupils with the celebrated characters, literary and scientific, that have flourished in the West; and with the manner in which they have sometimes forced their way to the notice of the world through obscurity and the most straitened circumstances.

191. In the 2nd Division the pupils have read the four sections of the Series of Lessons, and the Elements of English Grammar. Some of the students in this division, perhaps from their having commenced the English study at rather an advanced age, found some difficulty in pronouncing English words with propriety. But Mahádew Shástrí has taken great pains, and improved them in pronunciation to a great extent.

192. Major Candy has been good enough to take these two classes each once a week, and to give them valuable instruction in the critical knowledge of English and Maráthí.

193. For political economy and history all the students are formed into one class. They have read with me Whateley's Money Matters, recently translated into Maráthí by the Deccan Vernacular Translation Society, and have received several lectures from me on the subject of the distribution of wealth, comprising the most important principles by which the produced wealth is divided among different members of community, and the laws by which the rates of wages, of profits, and of rent are regulated. In my lectures I have generally followed the order in which the subjects are treated in the second book of Mill's Principles of Political Economy. It appears from the answers the students have returned to the questions, oral and written, that they have paid considerable attention to the subjects, and comprehend them very well. They can now

read any elementary work in the science with profit and intelligence.

194. They have also read in this session with Vishnu Pant Támankar the 1st volume of the History of the Maráthás. In this branch, also, the students gave very prompt and full answers, and afforded great satisfaction to the examiners.

195. For the Sanscrit studies, the Normal department is again divided into two divisions. The second has read the 1st Reading Book, and some of Æsop's Fables, translated into Sanscrit. The pupils in the 1st Division, some of whom have passed excellent examinations in Sanscrit, have all read Æsop's Fables.

196. In conclusion, I beg to observe that the table given under, of the marks which the students have got in each branch of their study, will clearly show the amount of progress they have made during the session, and the degree of diligence and attention with which they have applied themselves to each of the subjects.

KRISHNA SHASTRI,
Assistant Professor of Vernacular Literature.

REPORT ON THE MATHEMATICS, &C. OF THE NORMAL DEPARTMENT.

197. This department consisted of two classes in mathematics; the Senior Class was taken charge of by me, and the Junior Class by Vináyak Pant Gokhle. The Senior Class went over with me the whole of the conic sections in Hutton's Work by Rutherford, Hall's Differential Calculus, excepting the chapters allotted to analytical geometry, and the first chapter of Young's Mechanics. The Junior Class have gone over plane, analytical, and spherical trigonometry by Young, and differential calculus by Bál Gangádhar Shástrí.

198. In addition to the above mathematical studies, I have given them, twice in a week, lectures on practical astronomy. The most important among the subjects treated last year were the following:—

Determination of the meridian line.
Determination of the latitude.
Sun's motion in the ecliptic.
Measurement of time.
Parallax, refraction, aberration, and nutation.
Observatory, its use and importance.

199. At present we are not in possession of any astronomical instruments, but if we can have any they will be of great use to me in my lectures. Of the number of meteorological stations that Government are going to establish in different parts of India, if we are so fortunate as to get charge of the Poona station, we will then have a very good opportunity of showing our students how astronomical observations are made, and we will never feel the want of our own apparatus.

200. *Geography.*—All the Vernacular mathematical classes have to learn geography for three days in every week. The 1st Vernacular Class of English students, the 1st Vernacular Class of Sanscrit students, and the Normal Class, had finished the whole of the general geography of the four quarters, and their respective maps. The Normal Class, in addition to the above, had also learned the particular geography of several countries in Asia, from Major Candy's MS. At the time of the public examination I asked them a few questions in physical geography also, and I found that all of them answered me correctly. This class learns geography under Vishnu Pant Támankar.

201. In conclusion, I am glad to say that Vishnu Pant Támankar and Vináyak Pant Gokhle have given me every

satisfaction in the discharge of their duties in this department.

202. Before concluding this report, I beg to second a measure, proposed by Professor Fraser in his report of this year—a measure honorable to the College, and advantageous to those who get the benefit of it. The Poona College consists of three departments, English, Sanscrit, and Vernacular; a scholar has therefore an opportunity of distinguishing himself in all the three departments; and if he has also an opportunity of getting an honorable diploma conferred upon him at his leaving the College, it will be an ornament that he will be proud of wearing through life.

KERU LAKSHIMAN CHHATRE,
Assistant Professor of Natural Philosophy.

203. The following is the result of the Examination of the Normal classes in English at the close of the Session:—

204. *Junior Class.*

Teacher, MAHADEO SHASTRI PURANIK, Translation Exhibitioner.

No. on the roll		9
Present	8	
Sick	1	
		9

Studies.—Four sections of the Series of Lessons. Some Roots, Affixes, and Prefixes. Parsing.

205. *Remarks.*—The class has been carefully taught, and has done well, considering the numerous other studies of the scholars.

206. *Senior Division.*

Teacher, Assistant Professor KRISHNA SHASTRI.

No. on the roll	8
Present	8

Studies.—The whole of the Course of Reading, excepting the Poetical Pieces. Exemplary Biography, 110 pages. Roots as far as the letter G. Writing from Dictation. Parsing.

207. *Remarks.*—The reading is good ; apprehension of meanings good ; grammar good ; writing from dictation very good. The class is evidently well taught.

208. In the Appendix will be found a table of the marks gained by the students at their examination in their different branches of study.

V.—SANSCRIT DEPARTMENT.

209. The special report on the state of the Sanscrit department, which I lately made to the Board, renders it unnecessary for me to mention some things which otherwise would have required notice here.

210. This department is composed of two classes of students, viz. (1) those whose particular department it is, whose chief study is Sanscrit, and who, if they study anything else, study it in subordination to the former ; and (2) those who study Sanscrit in subordination to English. The number of students who belong to the former class has very much decreased since the amalgamation of the former College and the Government English School; but probably it will not sink much lower than it is now. It is still higher, I believe, than the number of students of the same description in any other institution. The number of students who belong to the latter class is increasing, and will continue to do so.

211. I insist as much as I can on the students of the purely Sanscrit department acquiring a good knowledge of the Vernacular; but there are some who have come from the south of India, to whom Maráthí is a foreign language, and who are reluctant to spend time in acquiring it. With these I am obliged to relax the rule. It is very difficult with many others to secure regularity of attendance, even at the Sanscrit classes, and much more at those of the

Vernacular department. Most of them are very poor, and many of them live by begging.

212. I am happy to say that some of the students of the purely Sanscrit department have expressed a wish to devote a part of their time to learn English. I have just formed a class of them. I am glad both that English should form an introduction to Sanscrit, and that Sanscrit should form an introduction to English.

213. The Professor and Sub-Assistant Professor appointed in the course of the last year, Náráyan Shástrí Abhyankar and Gopál Shástrí Gokhle, have shown themselves willing to make themselves generally useful. Both teach Sanscrit classes in the English department, and Gopál Shástrí has had charge of a Vernacular class, for which there was no other Teacher available. Krishna Shástrí Rájwáre, Senior Sub-Assistant Professor of the Alankár department, teaches one division of the Normal students Sanscrit.

214. The number of students in the purely Sanscrit department at the time of the Examination was

Stipendiary	10	
Non ditto	111	
		121

who are thus distributed in the four branches :—

Alankár and Kávya Shástras	47	
Nyáya	17	
Wyákaran	26	
Dharm	31	
		121

215. The junior students of every branch, as remarked in my last report, study the Rupáwali, &c. in it: only the senior students borne on the list of each branch study that particular branch.

216. The examination of the classes of the purely Sanscrit department was conducted by the Committee of Pandits entertained for that purpose. The examination of the Sanscrit classes of the students of the English and Normal departments was conducted by Assistant Professor Krishna Shástrí, Náráyan Shástrí, and myself.

217. Of the 121 students mentioned above, only 91 were examined; 30 were absent on account of sickness, leave, and disinclination. Of those examined the following is the result of the examination :—

Result in particular Shástra studied.

Numbers.	Branches.	Excellent. 1.	Excellent. 2.	Excellent. 3.	Middling. 1.	Middling. 2.	Total.
1	Alankár Branch	6	9	9	7	3	34
2	Nyáya Branch	3	5	4	1	2	15
3	Wyákaran Branch	4	4	2	5	..	15
4	Dharm Shástra Branch. ..	6	7	4	14	..	31
	Total..	19	25	19	27	5	95

NOTE.—4 were examined in two branches.

Result in Wyutpatti.

Numbers.	Branches.	Excellent. 1.	Excellent. 2.	Excellent. 3.	Middling. 1.	Middling. 2.	Inferior.	Total.
1	Alankár Branch.. ..	6	3	1	4	..	18	32
2	Nyáya Branch	5	3	2	4	..	..	14
3	Wyákaran Branch ..	2	3	..	4	..	6	15
4	Dharm Shástra Branch.	3	5	3	2	2	15	30
	Total..	16	14	6	14	2	43	91

218. This result, compared with the result recorded in my last report, is creditable to the students.

219. The following is the result of the examination of the Sanscrit classes of the students of the English and the Normal departments:—

220. *1st (highest) Class.*

Teacher, Assistant Professor KRISHNA SHASTRI.

No. on the roll		11
Present	9	
On leave	1	
Absent	1	
		11

Studies.—Rupáwali, 1st Sanscrit Reader, and first part of Hitopdesh.

221. *Remarks.*—This class passed a very good examination. The students are well taught, and are making good progress. The class is composed chiefly of Assistant Teachers.

222. *2nd Class.*

Teacher, GOPAL SHASTRI GOKHLE, Sub-Assistant Professor Sanscrit Department.

No. on the roll		14
Present	11	
Sick	1	
On leave	2	
		14

Studies.—Rupáwali, 1st Sanscrit Reader, and some popular verses.

223. *Remarks.*—This class passed a good examination. The teacher has been diligent.

224. *3rd Class.*

Teacher, NARAYAN SHASTRI, Professor Sanscrit Department.

No. on the roll		11
Present	9	
On leave	1	
Absent	1	
		11

Studies.—Rupáwali, and 1st Sanscrit Reader.

225. *Remarks.*—The class passed a pretty good examination.

226. *4th Class.*

Teacher, KRISHNA SHASTRI WAIJAPURKAR.

No. on the roll		19
Present	14	
Sick	3	
On leave	1	
Absent	1	
		19

Studies.—Rupáwali, a part, 1st Sanscrit Reader, 20 pages.

227. *Remarks.*—The class passed a good examination. The teacher, an ex-student of the Sanscrit department, provided by the Professors as a substitute, is attentive and diligent.

228. *5th Class.*

Teacher, NARAYAN SHASTRI, Professor Sanscrit Department.

No. on the roll	5
Present	4

Studies.—1st Sanscrit Reader, and a few Fables.

229. *Remarks.*—The students, who belong to the Normal department, passed a fair examination.

230. *6th Class.*

Teacher, KRISHNA SHASTRI RAJWADE, Sub-Assistant Professor Sanscrit Department.

No. on the roll	8
Present	8

Studies.—Æsop's Fables.

231. *Remarks.*—The class passed a good examination.

VI.—DEPARTMENT OF TRANSLATION.

232. There were three Translation Exhibitioners at the commencement of 1853, but, as I intimated my expectation in paragraph 244 of my last report, Náráyan Shástrí Apte, the Senior Translation Exhibitioner, was in March nominated acting Examiner and Reviser to the Dakshina Prize Committee. There were consequently only two exhibitioners through the year. As Náráyan Shástrí was appointed by the Dakshina Prize Committee to act for a year on

probation, the Board was so good as to sanction his exhibition remaining open for that period. In the month of December, during the progress of the annual examination, Mahádeo Shástrí Puránik, the senior of the two remaining exhibitioners, was nominated Master of the English School of Kurrachee on probation. So at present there is only one exhibitioner remaining, viz. Narsinh Shástrí Ok.

233. Both Mahádeo Shástrí and Narsinh Shástrí have been employed a good deal in teaching throughout the past year. Both had important classes in the Vernacular department; and in the English department the former taught the junior division of the Normal students, and the latter was entrusted with the instruction of the Candidate Class (highest School class) in history.

234. The work of translation done in the year by the three respectively was as follows:—

NARAYAN SHASTRI APTE.

From 1st January to 15th March 1853.

Translation of 10 pages of Taylor's Ancient History, in continuation of the work of the preceding year, and a fair copy of more than half of his translation of Euclid's Geometry.

MAHADEO SHASTRI PURANIK.

Translation of the last 200 pages of Sullivan's Geography; a fair copy of the first half of the entire manuscript; a translation of the pages of Nichols on the use of the Globes.

NARSINH SHASTRI OK.

Translation of 120 pages of Murray's History of India. The translation will cover more than 240 pages.

235. As soon as I can find time for it, I purpose to examine the translations which Náráyan Shástrí and Mahádeo Shástrí have completed. I shall then report on them to the Board, and solicit permission to lithograph them.

236. Though the Translation department of the College has thus early lost the services of three out of the four Translation Exhibitioners that were appointed, the cause of education still enjoys them. I rejoice that they have thus early earned promotion for themselves. My present Translation Class has two or three promising young men, who will, I hope, gain exhibitions at the next competition.

237. Of the product of my own personal labour at translation I have no great amount to report. Though earnestly desirous of doing much, I am so occupied by other duties,—the general superintendence of the institution, and the correspondence connected with it, the correction of proof sheets, and the preparation of proofs for the press, the examination and correction of exercises, &c. &c.,—that I am frequently for days and days, or even for weeks occasionly, unable to take it up at all. In my last report I stated that I had finished a description of Asiatic Russia, and had partly done a description of Asiatic Turkey. I have now to report that I have finished Asiatic Turkey, and have begun Hindustán. My account of Asiatic Turkey occupies more than 240 pages.

VII.—BRANCH SCHOOL.

238. This School, I am happy to say, has been in a flourishing state throughout the past year. The Master, Sakhárám Bálkrishna, is very efficient.

239. The number on the roll at the close of 1852 was 82; the number at the close of 1853 was 118. All pay the School fee.

240. At the examination of the 1st Class of the School in December, eight scholars were deemed worthy of being transferred to the Junior College Division of the College, and were accordingly transferred.

241. In the course of the last session the Master, Sakhárám, suggested to me the desirableness of having a Maráthí department in the School, and expressed his opinion that most would attend it. As the Maráthí speaking boys are but few, I had refrained from establishing Maráthí classes, but I was glad to make the experiment at Sakhárám's suggestion. A qualified Teacher was accordingly entertained, and classes were formed. They did extremely well at the examination.

242. The following is the result of the examination of the School taken on the 20th, 21st, and 22nd days of December:—

ENGLISH DEPARTMENT.

243. *5th Class.*

Teacher, RAMBHAJI.

No. on the roll..... 22
Present 21

Studies.—McCulloch's 1st Reading Book, the whole. Reading and Spelling.

244. *Remarks.*—This is a class of beginners. Pains are evidently taken with them.

245. *4th Class.—2nd Division.*

Teacher, HARI PANT.

No. on the roll..... 22
Present 20

Studies.—McCulloch's 2nd Reading Book, 40 pages. School Dialogues, 6 lessons.

246. *Remarks.*—The greater part do very well.

247. *1st Division.*

No. on the roll..... 15
Present 13

Studies.—McCulloch's 3rd Reading Book, 90 pages. A little Grammar. School Dialogues. The whole Geography of Asia.

248. *Remarks.*—Excepting two or three boys at the bottom, the class did very well.

219. *3rd Class.*

Teacher, RAMBHAJI.

No. on the roll..... 17

Present 16

Studies.—Chambers' Moral Class Book, 91 pages. Catechism of the History of the Maráthás, 34 pages. Reid's Grammar, Definitions, and a little Parsing. Geography of Asia and Europe from Reid.

250. *Remarks.*—There are some good readers in this class, with a few bad ones at the bottom. Knowledge of catechism good ; grammar good ; geography good.

251. *2nd Class.*

Teacher, KONDU AMRIT.

No. on the roll..... 27

Present 25

Studies.—McCulloch's Series of Lessons, 2 sections. Davy's History of England, the whole. Catechism of the History of the Maráthás, the whole. Geography of Asia, Europe, and Africa. Reid's Grammar, large type, the whole, with Parsing. Latin and Greek Roots from Series of Lessons, the whole. Writing from Dictation.

252. *Remarks.*—The progress of this class is very fair. In the reading there is considerable difference. Some read very well, while others are indifferent readers. In dictation most were nearly correct, but not one without some error. In Maráthí history, English history, roots, and in geography, the answers were very good.

253. *1st Class.*

Teacher, SAKHARAM BALKRISHNA.

No. on the roll..... 16

Present..... 14

Studies.—Murray's History of India, the first 5 chapters. McCulloch's Course of Reading, 91 pages. Chambers' Natural Philosophy, Part I. 44 pages. Hiley's Exercises on the Rules of Syntax, from page 35 to 72. General Geography of Europe, Asia, Africa, and America, with the particular Geography of India and the British Isles. 27 Lessons on Latin Derivations,

with Roots from Chambers' Etymology, 77 pages. Writing from Dictation.

254. *Remarks.*—This class has passed a very satisfactory examination. Reading good; history good; grammar good; dictation good; roots good; geography good; but some of the questions on the globe could not be answered; natural philosophy fair.

MATHEMATICAL AND ARITHMETICAL CLASSES.

255. *5th Class.*

Teacher, RAMBHAJI.

No. in the Class		30
Present	27	
Absent	3	
		30

Studies.—Learning to make Figures.

256. *Remarks.*—These beginners can do nothing but make figures.

257. *4th Class, consisting of three Divisions.*

Teacher, HARI PANT.

No. on the roll		33
Present	29	
Absent	4	
		33

Studies.—1st Division, Numeration; 2nd Division, Addition and Subtraction; 3rd Division, Long Multiplication and Division.

258. *Remarks.*—First Division understands numeration as far as millions pretty well. Second Division, appearance fair. Third Division, very respectable appearance for the time.

259. *3rd Class.*

Teacher, RAMBHAJI.

No. in the Class		20
Present	19	
Absent	1	
		20

Studies.—Tables of Weights and Measures, Reduction, and Compound Addition.

260. *Remarks.*—The class makes a very creditable appearance.

261. *2nd Class.—Two Divisions.*

Teacher, KONDU AMRIT.

2nd Division.

No. on the roll		15
Present	13	
Absent	2	
		15

1st Division.

No. on the roll		7
Present	6	
Absent	1	
		7

Studies.—2nd Division, Simple and Compound Proportion. 1st Division, Vulgar and Decimal Fractions.

262. *Remarks.*—Appearance of both divisions certainly not above an average.

263. *1st Class.—Two Divisions.*

Teacher, SAKARAM BALKRISHNA.

2nd Division, Algebra : Simple Equations containing two unknown quantities. Examples done by the majority very readily.

1st Division.—Algebra and Geometry.

264. *Remarks.*—This division made a highly respectable appearance. Some very smart and intelligent pupils in the class. A good many of the boys in this class are worthy of admission into the Junior College Division. Much praise is due to the Teacher for the zeal which he has evinced throughout for the benefit and welfare of his pupils.

VERNACULAR DEPARTMENT.

265. *1st or highest Class.*

Teacher, NARAYAN SHASTRI.

No. on the roll		20
Present	16	
Absent	4	
		20

Studies.—Æsop's Fables, 70 pages; Bál Wyákaran, the whole. Parsing. Writing from Dictation.

266. *Remarks.*—This class has but one student whose language is Maráthí, yet the reading of most is very good. The first (a Mahomedan young man) reads better than most Bráhmans. Grammar good; dictation of some quite correct, of all very good considering. The Teacher has evidently taken great pains.

267. *2nd Class.*

Teacher, NARAYAN SHASTRI.

No. on the roll		20
Present	17	
Absent	3	
		20

Studies.—Jágtíjot, the whole: Reading and Meaning; a little knowledge of Parsing.

268. *Remarks.*—The progress of this class is *very* good considering. There is not one boy in it whose language is Maráthí.

269. *3rd Class.*

Teacher, NARAYAN SHASTRI.

No. on the roll		24
Present	22	
Absent	2	
		24

Studies.—Lipidhara, the whole: Reading and Meaning.

270. *Remarks.*—This class consists of beginners. They do very well considering.

271. In conclusion, I beg to state that I have put into an Appendix the Tables of Marks, Examination Papers, Specimens of Answering, and other matters. I trust that on the whole the report will be deemed satisfactory by the Board.

THOS. CANDY, Major,
Principal of the Poona College.

Poona College, January 1854.

APPENDIX A.

RESULTS OF ANNUAL EXAMINATION.

JUNIOR CLASS.

Results of Annual Examination in Literature, &c.

Order of Merit.	Names.	History, 100.	History of Civilization.		Literature and Belles-Lettres.		Universal Grammar, 50.	English Essay, 50.	Number of Marks; whole Number, 400.
			Oral, 50.	Paper, 50.	Oral, 50.	Paper, 50.			
1	Bhoojung Rao..	100	50	42	50	47½	40	42½	372
2	Poorshotum Bhutt.. ..	100	50	45	43¾	50	....	40	328¾
3	Narayan Juggonnath ..	87½	50	42	50	50	....	40	319½
4	Govind Juggonnath.. ..	75	50	40	50	47½	....	46	308½
5	Krishna Rahalkur.. ..	87½	45⅝	38	31¼	40	30	24	296⅞
6	Bhao Sabday	37½	29⅙	40	43¾	33⅓	24	25	232⅛
7	Venayak Bhiday	50	29⅙	34	25	25	15	22	200⅙
8	Tatya Kurundikur . ..	37½	8⅓	18	31¼	23	16	13	147½
9	Dorabjee Puddomjee ..	25	25	20	....	20	....	20	110
10	Narayan Gopall	....	16⅔	20	25	12½	13	12	99⅙
11	Wassoodeo Narayan.. ..	....	25	21	....	12½	12	10	80½
12	Vishnoo Kelkur	....	12½	11	....	12	9	8	52½
13	Tatya Pole, ...	....	....	....	12½	12	....	20	44½
14	Kassinath Vittul	....	8¾	9	....	7¼	9	6	40
15	Gunnoo Puruzpay	....	....	....	6¼	....	....	....	6¼

P. S.—Nos. 2, 3, and 4 did not attend the class in universal grammar; No. 9 was absent for two months previous to the examination; No. 13 attended but one class, and wrote essays; No. 15 attended but one class, without writing. He is a Normal scholar.

Junior Class.

Results of the Annual Examination in Mathematics.

Order of Merit.	Names of Students.	Values. 114.
1	Bhoojung Rao	80
2	Govind Juggonnath	75
3	Wassoodeo Narayan	70
4	Kassinath Vittul	65
4	Krishna Rahalkur	65
4	Narayan Juggonnath	65
5	Vishnoo Kelkur	48
5	Poorshotum Narayan	48
5	Dorabjee Puddomjee	48

Senior Class.

Order of Merit.	Names of Students.	Values. 95.
1	Bhao Sabday..	71¼
2	Venayak Bhiday	65¼
2	Narayan Gopall	65¼
2	Gunnoo Puruzpey	65¼
3	Bhao Paitkur	47½

College Division.—Vernacular.

Results of the Examination of the Classes of the Principal, and of Assistant Professor Keru Lakshuman.

1st Class.		Oral Reading, Grammar, &c.	Vernacular Essay.	Paper of Questions on Idiom, Translation, &c.
Full Marks....		3	15	39
Narsinh Shástrí.....	Gained	3	..	28¾
Bháu Shástrí Paitkar.....	„	2¾	13½	27
Bálá Mone.....	„	2½	12	28¾
Govind Lakshuman Pándhurkáme.....	„	2	9	24½
Vishnu Pant Ránade.....	„	2½	..	22¾
Atmárám Pátkar.....	„	2½	12	28¼
Dájibá Nagarkar.....	„	..	..	20¼
Tátyá Shástrí Pol.....	„	2¾	13	17¾
Bábá Joshí.....	„	2¼	10	26¼
Gopinath Wámanjí.....	„	1	..	..
Náráyan Shástrí Tokekar.....	„	2	..	..
Pándurang Bálají Sonar.....	„	2	10	..
Rambhájí Thorat.....	„	2¼	..	16
Kondu Amrit	„	1½	..	14
Bálá Dámle.....	„	1¾	..	..
Rámá Shirolkar.....	„	¼	..	.
Wishwanáth Karmarkar.....	„	..	7	20½
Gopál Phátak.....	„	1¼	..	16
Mahádeo Shástrí Khare.....	„	1	..	16½

2nd Class.		Oral Reading, &c.	Essay.	Questions on Idiom, &c.	Sanscrit.	Chemistry.
Full Marks....		3	15	44	4	8
Bhujang Ráo	Gained	2	6	33	3½	..
Bháu Sabde.....	„	2	8	31½	3	8
Purshottam Bhat.....	„	1½	6	36	..	..
Náro Gopál.....	„	2	8	32½	3	8
Wásudew Náráyan.....	„	1¾	8	30¾	2½	8
Govind Jagannáth.....	„	2½	12	34	1½	..
Cáshináth Withal	„	1¼	10	30½	3	6
Vishnu Kelkar.....	„	1¼	4	27	2½	2¼
Vináyak Bhide.....	„	2	7	28¾	3	6
Krishna Rahálkar.....	„	1¾	8	31¼	3½	8
Náráyan Jagannáth	„	2¼	8	32½	..	..
Tátyá Karandikar.....	„	1½	6	23¼	..	..
Dorábjí Padumjí	„	½	..	30½	..	..

APPENDIX B.

SELECTIONS FROM EXAMINATION PAPERS.

Senior Class.—Paper Examination.

I.—*English Essay.*

Subject.—Education: the true conception of it defined; considered as to its constituent parts—moral, mental, social, and physical.

The classes of seminaries required in a complete national system of education, and these distinguished with a view to the character of instruction, and its object.

II.—*Moral Philosophy.*

Subject.—The Doctrine of Conscience, as taught by Bishop Butler.

III.—*Chemistry.*

Subject.—The Atmosphere; its ingredients, the properties of each; the mode of ascertaining their presence; the proportion of each; the mode of ascertaining it; the uses of the several ingredients.

The Law of the Diffusion of Gases.

Junior Class.—Paper Examination.

I.—*English Essay.*

Subject.—Comparison between the British and Mahomedan rule in India.

II.—*Literature.*

Subject.—Criticise the following passage from Byron:—

"I saw two beings in the hues of youth
Standing upon a hill; a gentle hill,

Green, and of mild declivity, the last
As 'twere the cape of a long ridge of such,
Save that there was no sea to lave its base,
But a most living landscape, and the wave
Of woods and corn-fields, and the abodes of men
Scattered at intervals, and wreathing smoke
Arising from such rustic roofs ; the hill
Was crowned with a peculiar diadem
Of trees, in circular array, so fixed,
Not by the sport of nature, but of man :
These two, a maiden and a youth, were there,
Gazing—the one on all that was beneath
Fair as herself—but the boy gazed on her ;
And both were young, and one was beautiful :
And both were young—yet not alike in youth.
As the sweet moon on the horizon's verge,
The maid was on the eve of womanhood ;
The boy had fewer summers, but his heart
Had far outgrown his years, and to his eye
There was but one beloved face on earth,
And that was shining on him."

III.—*Belles-Lettres.*

1. Define Taste, and the two characters of a perfect taste.

2. Discuss the question, whether there be any Standard of Taste.

3. Define Criticism—its object, origin, and usefulness.

4. The Sublime in Writing : define it ; give instances of it ; state and explain some things essential to it ; state and define the faults opposed to it.

5. Beauty : enumerate some of those classes of objects in which beauty remarkably appears, and point out the separate principles of beauty in each.

6. Style : define it ; state and explain the qualities of perspicuity, considered with respect to words and phrases.

IV.—*Universal Grammar.*

1. Give a general view of those faculties of intellect and will on which the Science of Language depends.

2. Words: their classification as parts of speech.

3. Ideas: the doctrine of Ideas as taught by Plato; contrary theories; classes of ideas, or ideas objectively applicable to spiritual, mental, and corporal substances.

V.—*History of Civilization.*

1. Define the popular sense of the term Civilization. State and explain its elements, and their mutual connection.

2. Describe the different stages through which the Christian Church had passed at the Fifth Century; and state the grand benefits it conferred at that period on the European world.

3. Explain the true character of Barbarism, its principal causes, and the attempts made at organization from the fifth to the ninth century.

4. Describe a small Feudal Society, and the influence of feudalism upon the character of the possessor of the fief, upon the spirit of family, and upon the Colonists. State the efforts made regularly to organize feudalism, the causes of their failure, and the influence of feudalism on civilization.

Senior Class.—Mathematical Paper.

Hydrostatics.

1. If two fluids of different densities are contained in the separate branches of a siphon, prove that they will be in equilibrio when the altitudes above where they join are reciprocally proportional to their specific gravities 15

2. Prove that the pressure on the bottom of a vessel containing horizontal strata of fluids of different densities is equal to the area of the bottom multiplied by the sum of the products of the thickness of every stratum, and their specific gravities 20

Hydraulics.

3. Determine the quantity of water discharged by a small vertical or horizontal orifice, the time of discharge, and the height of the fluid in the vessel when any two of these quantities are known. 15

4. Hence determine the quantity of water W′ which

is discharged in the time T, from any other vessel in which A′ is the area of the orifice, and H the altitude of the fluid. 5

Pneumatics.

5. Let M A B represent a column of air whose base A B rests upon the earth's surface, and let it be divided into strata of uniform thickness by the straight lines C D, E F, G H; also let the densities in each stratum be equable. Let the densities of the several strata be denoted by d, d', d'', &c. and the weight of the air by which they are pressed by W, W′, W″, &c.; then prove that $d : d' = d'' : d'''$ &c.; .. 20

6. Prove that the velocity with which air flows out from a vessel is always constant 20

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JUNIOR CLASS.—MATHEMATICAL PAPER.

Spherical Trigonometry.

1. Prove that $\cos a = \frac{\cos A + \cos B \cos C}{\sin B \sin C}$ 10

2. From the above deduce analytical expressions for the sines of the sides in term of the sines and cosines of the angles 20

3. Investigate the formula for finding the other parts of a spherical triangle when two sides and the included angle are given 16

4. Prove the truth of Napier's rules for the circular parts, and express the rules in language 20

Astronomical Problem.

5. Given the right ascension of the star Aldebaran 67° 40′, and its declination 16° 8′ north; it is required to find the latitude, longitude, and angle of position, the obliquity of the ecliptic being 23° 27′ 10

Analytical Geometry.

6. Find the equation to a straight line which passes through a given point, and makes a given angle with a given straight line.. 4

7. Find the analytical expression for the straight line which joins two given points.. 4
8. Find the equation to the parabola 8
9. Find the equation to the ellipse 8
10. From the last found equation, and the definition of the hyperbola, simply state its equation 4
11. Solve the general problem for the transformation of co-ordinates.. 10

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APPENDIX C.

SPECIMENS OF ESSAYS AND ANSWERING.

Senior Class of Literature.

I.—*English Essay.*

Education: the true conception of it defined—considered as to its constituent parts, moral, mental, social, and physical; the classes of seminaries required in a complete national system, and these distinguished with a view to the character of instruction and its object.

The question What is the true conception of education? is of the highest importance to every one. This question is not only of the utmost importance to a man who has in view his self-instruction, but also to those who have children to be educated, and to the philanthropist who takes an interest in the welfare of the community at large. But, strange to say, that almost every one in this country is entirely mistaken as to the true conception of education.

Professor Fraser recently remarked in one of his lectures that "Socrates the son of a statuary and midwife playfully observed, that at different periods of his life he followed the profession of each of his parents—that of his father in earning his daily bread, and that of his mother in developing the character of his numerous disciples; for in the height of his fame as a philosopher and a teacher, this aged sage claimed no higher prerogative than simply to *evolve* from his pupils the ideas and sentiments which lay dormant within them,—a conception of *education* so just and true, that it has been incorporated into the very structure of the Latin and English languages." This is the true conception of education.

We beg pardon of our Professor for having inverted the order of treating the subject. We cannot here give the frame-work of general education better than by writing from our memory the views of our Rev. Professor. In the 1*st* place, there should be vernacular *schools*, where the children should be taught to read and write their own tongue very fluently and correctly; principles of vernacular grammar; a course of practical arithmetic; general geography; and the elements of elocution. In this seminary the youth should be made to stay till he arrives at the age of 12 or 14. The school will produce a class of good labourers and tradesmen. 2*nd*.—There should be *academies*, where the course of tuition ought to be much higher than that of the school. The boys attending these institutions should not be under 14. Here they should be taught the English language, and to read as fluently as possible; they should at the same time be able thoroughly to understand what they read; and a course of mathematics as far as the end of Euclid and quadratic equations. Principles of English grammar should also be taught very thoroughly. The student of the academy should be able to translate from the vernacular into English, and *vice versâ*. The academy would send out intelligent clerks, &c. 3*rd*.—There should be *colleges* established for training the youth in the higher branches of mathematics, mental and moral philosophy, political economy, physics, and natural history. This course of training would furnish the gentleman, the merchant, the teacher, &c. and would prepare the student for 4*th*, the highest seminary (the *university*), where a professional education should be given, to supply the country with lawyers, doctors, &c. These different sorts of seminaries should, in my estimation, be established over the land. So much for the machinery; now for the thing itself. One of the most important branches of education is the bettering of man's principles of morality. A man's moral principles must be bettered, because he must be able to discharge his duty in conformity with the commandments of the divine Creator. Of course nothing is of such consequence to us as the improvement of our morals: no part of education, therefore, should be so carefully provided for as the moral. If we take a general view of systems of education, we shall find that those produced the best

results which have made the best provision in this respect. Look at Scotland,—contrast that country with those from which the moral part of education has been systematically excluded by an *index expurgatorius*. In India, the moral has been too much excluded, through the fear of its becoming religious. It is right in principle that Government should not interfere with religion, but it is vain to attempt to exclude religion from education in India. No sooner does a Native youth begin to learn English, than he begins to disbelieve the religion of his ancestors. This is of course very right, for a lamp placed in the broad daylight gives no light at all; so the falsehoods that are contained in the Hindoo religion begin to give way before the self-evident truths that present themselves in the course of his education. For instance, when a Native youth begins to study geography, the false notions that were inculcated to him in his boyhood about the height of the mountain Meru, and about the impossibility of men crossing the Himálaya, after a few days' struggling, entirely vanish from his mind; and that is the beginning of his viewing the religion of his country in an unfavourable light. But this might lead to a false supposition, that as the fabric of Hindoo superstition begins to give way before the light of true knowledge, its place is supplied by another purely religious or moral principle, sufficiently strong and durable. No; the mind of the so educated youth remains entirely devoid of sound theology.

Another of the most important branches of education is the training of the mind. This mental education instructs us in valuable knowledge, and at the same time its right use. If the mind be not instructed, what is the difference (if the expression may be allowed) between the mind of the brute creation and of man? The naked wanderers of New Holland and of North America are only a few steps above the brute creation; and what is the reason of this? Is it that those men have no minds at all; or, if they have, that they are not capable of improvement? No, this is not the reason at all. But the reason is the entire neglect of mental training in those parts of the world. It has been very truly said by an English poet, that "it is the mind that makes the body rich; and as the sun breaks through the darkest clouds, so honour peereth in the meanest habit."

Oh, what an ocean of meaning is conveyed to our mind by these few lines! To paraphrase them to the full extent is beyond the reach of my limited understanding. Yes, by the culture of mind man is enabled to see the works of his Creator in their true light. An educated man cannot take a step where he does not see the harmony of all the parts of this universe. Nay, he also sees that all these parts are made harmonious to make him happy; and this, too, with a plan of absolute benevolence. But all these things will be disclosed only to that man who believes that there is a God. Oh what a happy College would ours be if all the students were made to drink at the fountain of true morality in the course of their mental training! For God has given them everything unsparingly; but if the Divine gifts did not come into play properly, it will be the same thing as if we had them not. In not using those gifts we thwart the wishes of Nature, who is a thrifty goddess, who never "lends the smallest scruple of her excellence, but determines to herself the glory of a creditor's thanks and use." In short, a properly cultivated mind gains ascendancy over everything in nature.

Now we will proceed to a third great part of education, namely the culture of those affections and manners which elevate and endear man in society. Of course nothing is so becoming a man of high education as good behaviour, polite speech, &c. To live in society is the innate tendency of man, &c.

BALA MONE.

II.—*Butler: Moral Philosophy.*

Subject.—The Doctrine of Conscience, as taught by Butler. "Butler," says Mackintosh, in his Treatise on Ethics, "has taught truths more capable of being exactly distinguished from the doctrines of his predecessor, more satisfactorily established by him, more comprehensively applied to particulars, more rationally connected with each other, and therefore more worthy of the name of discovery, than any with which we are acquainted." The doctrine of the moral sense orignated with Lord Shaftesbury, and Butler is more indebted to him than to any other philosopher; yet "whoever will compare their writings will without difficulty find a distinction between the two builders,

and the larger as well as more regular and laboured part of the edifice which is due to Butler."

In his first sermon, Butler lays down the proposition "that there are as real and the same kind of indications in human nature, that we were made for society, and to do good to our fellow creatures, as that we were intended to take care of our own life and health, and private good; and that the same objections lie against one of these assertions as against the other." In support of this proposition, he gives three proofs:—

1*st*.—There is the principle of benevolence in man, which is in some degree to society what self-love is to the individual.

2*nd*.—We have several passions and affections distinct from benevolence and self-love.

The first mention he makes of conscience, is when he adduces it as his 3*rd* proof in support of this proposition. He here defines it to be a principle of reflection, by which men distinguish between, and approve or disapprove their actions. When the mind surveys what passes within itself—its affections, passions, inclinations, &c. and also the actions consequent thereupon,—it approves one and disapproves another. This faculty in man, he says, by which he approves or disapproves his heart, temper, and actions, is conscience. He shows, then, that this faculty produces social good; it restrains men from doing mischief to others, and leads them to do good. The parent has an affection for his children,—this leads him to take care of their health and education; but the reflection that it is his proper business,—that it is right to do so,—added to the affection, becomes a more settled principle in him, and leads him to go through great difficulties and suffer pains for the sake of his children. Further, he distinguishes it from affection.

Finally, he concludes his notice of it here by showing how undeniable it is that there is this faculty in man. Suppose a man to relieve an innocent person in distress; suppose the same man in the fury of anger afterwards to do the greatest mischief to a person who had not given any just cause of offence; and, to aggravate the injury, we may add that he did this to one who was his benefactor: now, if he will reflect upon both these actions, without any regard to their consequences to himself, he

will certainly approve of one and disapprove of the other. To say that he will regard them in the same light is too glaring a falsity to need refutation. Having shown that man has this principle of conscience or reflection, he proceeds to establish its supremacy. It may be said that as man has appetites and passions as well as conscience, and as the former often prevail over the latter, man acts agreeably to his nature by following that principle, be it passion or conscience, which for the present happens to be strongest. But a man may act according to the principle which for the time is strongest, and yet act in a way most contrary to his real proper nature. He does so whenever, for the sake of a present gratification, he rushes into the foreseen danger of extreme misery or ruin. He does not, however, act contrary to his nature, when, from foresight of such misery or ruin, he denies a present passion. Self-love, then, is a principle superior in nature to passion. Now, when we compare the principle of conscience with other inward principles, we find that it is superior in nature to them all. It exerts itself magisterially in distinguishing between internal principles as well as external actions, in determinately pronouncing some actions to be good and right, and others to be evil and wrong. This natural superiority is indeed part of the idea of conscience: we cannot form a notion of it without taking in judgment, superintendence, and supremacy. As in civil government a man may be powerful without authority, so passions may sometimes be powerful, but they have no authority. "Had conscience strength as it has right, had it power as it has manifest authority, it would absolutely govern the world." This faculty is placed within us to be our proper governor, and to regulate all our other principles of action. This is its right and office, and this natural right and office remain the same, notwithstanding the usurpation and prevalence of various appetites, passions, and affections.

NARSINH SHASTRI OK.

III. — *Chemistry.*

The Atmosphere: its ingredients; the properties of each; the mode of ascertaining their presence; the proportion of each; the mode of ascertaining it; the uses of the several ingredients; the law of the diffusion of gases.

The atmosphere is not a chemical compound, but a mechanical mixture of several gases. The most abundant of its ingredients is nitrogen (N). The first, perhaps, in importance, as that on which the positive chemical characters of the atmosphere depends, but the second in point of quantity, is oxygen (O), in consequence of the presence of which, the atmosphere has the power of supporting combustion and animal respiration. These two, it may be said, constitute atmospheric air—oxygen, bulk 20, weight 22·3; nitrogen, bulk 80, weight 77·7. The resulting mixture is, so far as we know, the only one which can sustain the functions of vitality, and the economy of the world. With regard to the manner in which the two are associated in the atmosphere, this, as I have stated above, is usually said to be mechanical. However that may be, it is certain that the compound substance is not endowed with those new qualities which usually result from chemical unions, but presents merely a mean resultant of the qualities manifested by oxygen and nitrogen individually. This is not the case with the five compounds of oxygen and nitrogen. Besides these gases, there is a small quantity of the following: carbonic acid (CO 2), light carburetted hydrogen (CH 2), ammonia (NH 3), and an amount of watery vapour, which varies with circumstances.

The proportions in which these gases combine and form the atmosphere are as follows:—In 100 volumes of air there are 79 volumes of nitrogen, and 21 volumes of oxygen; or in 100 measures by weight of air, there are 77 measures by weight of nitrogen, and 23 by weight of oxygen. The proportion of carbonic acid is $\frac{1}{100}$; light carburetted hydrogen is nearly in the same proportion. The quantity of watery vapour depends on the temperature, and therefore changes with latitude, season, elevation, &c. The relative quantity of ammonia is so small that it is not yet exactly ascertained.

Properties.—Oxygen has no colour, odour, or taste. It is heavier than atmospheric air as 11 to 10. It is soluble in water: 3½, or, according to some, 6½ cubic inches of it can be dissolved in 100 cubic inches of water. It supports combustion, and animal respiration; although it is not itself combustible, nor can any animal live for a protracted time in undiluted oxygen.

The results of combustion in it are either acids, alkalies, or neutral bodies, simply termed oxides.

Nitrogen possesses no positive properties. It is colourless, inodorous, and without taste. It is neither combustible, like hydrogen, nor does it support combustion, like oxygen. Its chemical relations do, indeed, impart to it some claim of being regarded a combustible. It is neither acid nor alkaline. Boiled water absorbs it to the extent of 1½ per cent. Faraday thus speaks of it :—"Whether we have regard to the enormous amounts of this element which pervade nature, or the importance of the functions to which it is made subservient, the curious chemical affections with which it is endowed, the number and various conditions of its numerous compounds, or the apparent paradox of the most violent combinations resulting from an element, which, in its simple state, is characterised by a quality of inaction or passiveness: all these are considerations which bespeak our interest in an eminent degree for nitrogen."

Carbonic acid is colourless, but it has a sharp taste. It is poisonous, and destructive to animal life, and yet it is concerned in the constant function of respiration, "bathing unharmed the air cells of the lungs—remaining in contact with the most delicate tissues, yet producing no evil results." It is so much heavier than atmospheric air that it can be poured like a liquid from one vessel into another. It neither burns nor supports combustion. If shaken with lime-water, the latter precipitates chalk or carbonate of lime. It reddens turmeric, and has a peculiar smell.

That oxygen is present in atmospheric air may be proved by burning any substance in it; for we know that it is only oxygen that supports combustion.

The presence of nitrogen in the atmosphere may be known by the effect which it produces on combustion. This being neither combustible nor a supporter of combustion, if we extract its associate oxygen from a portion of air, it extinguishes the flame of a lighted candle immediately after it is introduced into it.

Carbonic acid is detected by leaving a shallow vessel full of lime-water in the open air. The lime-water, after some time, becomes turbid, in consequence of its being combined with

carbonic acid, and forms the insoluble carbonate of lime, namely chalk (CaO, CO 2).

The presence of ammonia in air is ascertained thus :—Take a quantity of rain water, which absorbs the ammonia contained in the air. Distill a fourth of it. When it is condensed, mix it with muriatic acid, then it will form the substance called sal-ammoniac (NH 3, HCl), and when quick-lime is added to it, it gives off its ammonia, which can be known by its smell of hartshorn.

The relative quantity of nitrogen and oxygen in the air is ascertained by a simple and interesting experiment, which is as follows :—Take a small tube full of common air, and graduated into a hundred equal parts ; put a piece of phosphorus into it, and then put it with its mouth downward in a trough, and leave the arrangement undisturbed for 12 hours. The phosphorus combines with the oxygen, and forms an acid, which the water dissolves. The water enters into the tube, and fills one-fifth part of it. Thus the proportion of these two gases is ascertained to be as 1 to 4.

The uses of these ingredients.—Oxygen supports the respiration of animals. The existence of water animals chiefly depends on the solubility of oxygen in water. It constitutes nearly one-half of our globe.

Nitrogen dilutes the oxygen to the strength most suited to the wants of animals and vegetables. Animals made to breathe pure oxygen are thrown into fever, which soon proves fatal. Nitrogen increases the bulk of the atmosphere, without conferring on it any active chemical property, and thus provides for the occurrence of winds, the tempering of climate, the diffusion of heat, and the scattering of the sun's light. Thus nitrogen serves a very important purpose in the economy of nature.

Carbonic acid supplies plants with their essential element, namely carbon, which they obtain by decomposing it, by their leaves, into its constituents, namely carbon and oxygen, retaining the former, and restoring the latter to the atmosphere.

Bhao Paitkur.

JUNIOR CLASS.—LITERATURE.

I.—*English Essay.*—Mahomedan and British Rules compared.

The subject of the present exercise is very important. It is practically useful, considering that the Natives of this country are by the force of circumstances consigned to the rule of the British nation, and that in all human probability they will have to remain so for many many years to come. It is not only the interest, but even the duty of every well-wisher of the Natives to consider calmly and dispassionately the effect on the welfare of the country which the Mahomedan and British Governments have each produced, and thereby determine whether, in consequence of the change in the governing powers, the Hindoo has reason to bemoan or to rejoice at his lot. If we familiarly mix with the masses, with the people, who, unlike Moonsiffs and Mámledárs, do not obtain handsome salaries, but are constrained to earn their scanty meal by the sweat of their brow, we hear so many complaints of the harshness and rigor of the present times, —so many fond desires to be restored to the good old ways of the Mahomedan and Maráthá rules,—that we cannot but pause to consider whether, under the British rule, the Hindoo ryot is really that abode of misery which, from his own description of himself, he would seem to be. That a good deal of truth is mixed with a mass of nonsense in their complaints, no one can question. I think I should carry with me the good sense of the whole Native community were I to assert that on the whole the British Government is by far the best under the sway of which this country has been or can be.

But then the question arises—If such be the case, whence the discontent so prevalent amongst almost all classes?—whence the prevalent desire to see the British rule give way to one of anarchy and confusion, of tyranny and oppression, of injustice and crime, like those that obtained in this country in past ages, and under which the hand of oppression, strengthened by power, unscrupulously crushed helpless innocence? To answer this question, which is indeed the real subject of this essay, I must address myself to history, and from its unerring pages glean what for good or for evil the Mahomedans and British have done to the masses of this land. This task is so vast, that to do

justice to it demands abilities of the highest order, and presupposes an acquaintance with history so extensive that it would be presumptuous in me to pretend to treat it with fulness and complete success. Some of the ablest minds and pens have been employed on the subject, and yet it is not exhausted. Believing, however, that it has a good influence on the heart and mind to think and write upon a subject involving the best national interests, although my sentiments will not be worthy to be compared with those which the subject has already called forth, I shall attempt, to the best of my ability, to take a view of the state of the Native community under both these rules, and thence endeavour to draw a reasonable reply to the vexed question—What have the Mahomedans and British done for a people whose destinies they ruled?

The best criterion by which to judge whether a Government is good or otherwise, is to consider what it has done for the social and individual liberties and happiness of its subjects. The Government in which the will of the sovereign is the law of the land—in which security of life and property depends on the mere caprice of a being by no means superior to the rest in virtue and wisdom—cannot be called a good Government; cruelty, oppression, and injustice are practised when the crowned head happens to be a Nero or a Caligula, but there is no telling what good might be irresistibly done when the throne is occupied by an Akbar,—a prince who was not ashamed to reward and notice merit, though clothed in rags,—a prince whose name is remembered with pride by all classes,—who knew no relations, recognised no friends, but such as were distinguished by their virtue,—a prince whose chief, and indeed only pleasure was to contribute to the welfare of his subjects,—who valued existence and the throne only as they gave him the power of adding to the sum of human happiness. This argument, though dazzling, is yet not sound. On the whole, the amount of good done when some such bright exceptions as Akbar occur among despotic rulers is dust in the balance when compared to the havoc perpetrated as a general rule by despotic princes.

The golden maxim of the English law, that "it is better that a hundred guilty persons escape than that one innocent person

suffer," at once crushes the argument to the ground. If we appeal to the voice of history, what is the response she gives to our inquiry? Does she not tell us of the many Sirdars ruined by Bajeerow, deprived of all that their own and their fathers' swords had acquired; and all because they could not join in those scenes of debauchery with which the last few years of the Bráhmanical rule disgraced the seat of power? Does she not unfold to us the horrifying fact of a Taglak in his humour shedding the blood of thousands of the most harmless of his subjects? Volumes would not suffice were we to cite all the instances in which such monsters in human shape have, by the abuse of enormous power, which they might have wielded for the good of millions, perpetrated crime, and produced an amount of misery too black and too great to be adequately described. We have shown, then, that a despotic Government, liable to such abuse of power, is not a good Government, and that the Mahomedan Government, as such, must have been a bad one. Let us now consider what are some of the elements of good government, and whether these are to be found in the Mahomedan or British rule.

We have said above that a good Government is known by its institutions for the social welfare of the governed—by the laws it enacts to secure the private and public liberties of the people. Let us now consider whether both or either of the two powers we are now considering have established a claim to be called a good Government. We need not inquire whether the Mahomedan Governments have any claim to consideration on the score of having enacted laws for the security of the rights and liberties of their people. They were a despotic race; no code was made to guide the prince or his minister: all was the work of chance. In fact, the argument in some of the foregoing paragraphs to prove the defects of despotic rule at once decides the case against the Mahomedans. We have now to consider how the question stands with regard to the British. Here in theory and practice the superiority is unquestionable. No one can say that the British rule without law. The council chambers, the codes of regulations, the courts of justice, and the revenue administrations are so many living proofs that life, and property, and

liberty are respected. We no longer hear of a powerful chieftain alighting, like the Holkar, on the unprotected community, and wrenching with an iron hand from the helpless people the fruits of their industry. Rebellions, gang robberies, systematic plunders, have become almost historical legends. The poor can now lift up their heads, and, if unjustly oppressed by those "clothed with a little brief authority," they can bring them to the seat of judgment, and legally demand justice, though they may oftentimes not succeed in getting it. In fact, if all were done that Government seems to wish to have done, the Natives could not but have every reason to hail the day when the British standard was hoisted in India, and when the destinies of her sons were consigned to the care of the merchants of the British isle. But the case is otherwise. We are obliged to subscribe to the truth of the complaint, that many honest intentions are frustrated by the natural depravity of some entrusted with the task of carrying them out. Any one who has read over cursorily the pamphlets on Indian affairs lately published will have seen the proof, and felt the force of this remark. Men have been raised to the bench who have yet such conceits of the superiority of their own race over the Hindoos, that they withhold from the latter what common humanity claims. They manifest for the sufferings of the Natives an indifference that cannot but pain a generous heart. When justice to the Natives interferes with the ease and convenience of these men, they make not the least scruple to sacrifice the former to the latter. In short, although in theory the Government is conducted by laws professing to be founded on humanity and justice, practically there are, through the faults of the law's administrators, too many violations of both, as under a despotic rule. But the whole evil is not stated by saying that the laws are not well administered, for many of them are behind the spirit of the age. To prove these assertions would be a task of no great difficulty ; but want of time compels me to hasten to some other considerations, which ought to occupy a prominent place in our estimate of the advantages resulting to India from the British Government. And here so many of such considerations present themselves, that the most difficult task is the selection. Whatever advantages civilization

has over barbarism, the same has the British sway over its Mahomedan predecessor. The press, the railroad, the steam carriage by sea and land, the macadamized roads, the improved revenue settlements, educational institutions, with much other mighty machinery of civilization, are things to which the advocates of British rule can proudly point as so many imperishable monuments of its superiority—monuments that will make the name of Britain remembered in India while the world lasts.

We set out with the assumption that the complaints which we daily hear of the evils of the British rule are not entirely unfounded; but from the enumeration of its benefits just made, one would naturally conclude that we asserted what we did not believe, and that in our estimation the British Indian Government is faultless. No: although we appreciate what is excellent in British rule, we are not blind to its faults. The chief cause of the dislike to the present rulers is their being foreigners. Indeed a foreign rule, however good, cannot but be felt at least depressive; and the British, from the narrow policy of keeping all good things to themselves, make it infinitely more so. Under the worst of the rulers that had the reins before the British, never were the Natives excluded, by their position as a conquered race, from occupying the highest places under the Government. It is this that makes our present rulers appear like harpies, that come solely to rob and to destroy. Under the former rulers, however insecure property was, it never left the country; what one lost another gained.

It will be pretty clear from what little I have written above, that the Mahomedan Government is not to be praised; and that the present Government, with many faults, has been a source of good, which the people by their loyalty and industry ought to acknowledge.

GOVIND JAGANNATH.

5th December 1853.

II.—*Literature.*

Lord Byron criticised.—This description of Byron's parting interview with Mary Chaworth pleases and interests in a marvellous manner. What renders it so impressive? There is no exciting adventure, no thrilling incident related. Why does it

thus kindle a flame within us? It is the sympathy we feel for one whose passionate love was unrequited, and whose farewell scene with her whom he loved he himself has described "in the most exquisite colours of descriptive poetry."

There is something interesting in the place of this meeting: it is a hill, having a gentle slope, and so situated that he compares it to a promontory or a cape, not projecting into the sea, but into waving corn-fields. These are beautiful objects in themselves. Then there are, here and there, some scattered abodes of men, and the curling smoke rises from these rural houses in Mr. Hogarth's line of beauty. All these tend to heighten the beauty of the description. The hill was covered with trees—another beautiful feature in the scene. And, again, these trees were placed in a regular order by man, evidently for use, and not scattered at random by the hand of nature, which mark of design and utility, as we have observed in Blair, is one of the sources of beauty. After all this, he describes two youths, one a maiden and the other a boy, standing upon this hill. Mary Chaworth was looking down on all the objects below her, which shows that she had no love for Byron; but the boy, in the midst of beautiful and charming scenery was gazing upon her,—how expressive of the ardent love he had for her!

PURSHOTTUM NARAIN BHUT.

7th December 1853.

III.—*Belles-Lettres.*

Taste is liable to so many fluctuations that some men have been led to suppose that there is no standard. But if we hold this to be true, all tastes would be equally good. It follows, then, that the taste of a North American Indian or Laplander is as delicate and correct as that of Addison or Johnson. But there is no one who would take this conclusion to be true. This, then, proves that there is a standard of taste; that there are good and bad tastes.

Diversity of taste does not imply the corruptness of taste in every instance. One man loves poetry; another history. One prefers tragedy to comedy. Some are pleased with an ornamented style, others with what is simple and chaste. But

this diversity is admissible where the objects are different. Though one man likes Homer more than Virgil, another prefers Virgil to Homer, yet both of them may be right in their tastes. But if one of them says that there are no beauties in Homer, that his poems are insipid and spiritless, while the other says that they are highly beautiful, then one must be wrong, and the other must be right. Now a question arises, what is the standard to which we can refer all different tastes? A standard must be of such undoubted authority as to be the test of all objects of the same kind. In all cases where the imitation of objects in nature is intended, conformity to nature is a standard of taste; but this we cannot refer to in every instance. If there were any one who possessed in perfection all the powers of the mind, whose judgment was unerring, his decision would be regarded as the perfect standard. But as there is no such man, the sense of the public in general must be regarded as the standard of taste. That which pleases most men should be pronounced as beautiful. But were we obliged to collect the votes of people before we could judge of any performance of genius, it would be a very laborious and tardy task. Is there no other way to discern the true merits of any work than that of appealing to the public sense in every case? There are principles of good sense and sound judgment which can be applied to the objects of taste as well as to the matters of philosophy and science. When I say that the sense of the public is the standard of taste, it must be understood of men in a refined and flourishing nation, where arts are cultivated. Even in such nations some accidental causes may warp the true merits of genius. Some of them are these: a licentious court may introduce an affected style of writing; envy may put down the operations of genius; while party spirit may exalt any work more than it deserves. But such things do not last long. At last the genuine taste will gain ascendancy. The conclusion that follows from the above discussion is that taste is far from being arbitrary.

NARAYEN JUGGONNATH.

IV.—*Universal Grammar.*

Universal conceptions ought to be called ideas—a word used by Plato to express a law of our minds according to which lower

conceptions take their form. These laws are impressed on the mind just as the laws of vitality, &c. are impressed on the bodily organs. They are born with us as faculties not yet put in action,—in this sense they are not innate ; but capable of development from the first,—in this sense they are innate.

The doctrine of ideas as taught by Plato, and by his follower Aristotle, continued to prevail up to about two centuries ago ; but in the last two centuries it has been superseded by a number of theories, which are of a very strange nature. Some of these theories are as follows :—

1*st*.—That ideas are not acts of the mind, but separate objects which it perceives.

2*nd*.—That ideas comprise all our thoughts.

3*rd*.—That ideas are derived partly from sensation, and partly from reflection.

4*th*.—That ideas of reflection are copies, or combinations of sensation.

5*th*.—That both sensations and reflections are mere bodily acts.

The first notion of thoughts, proposed as a theory, was that they were airy forms, emanating from external bodies, entering our minds through our senses. Descartes and others rejected this gross fiction, but they held that an idea is a substance separate from the mind ; that the mind can only receive it passively, and work after it as the hand does after a model. This is equally irreconcileable with Plato's doctrine. Mr. Locke's perversion of ideas is very singular, and deserves to be noticed here. He employs the term idea for all modes and forms of thought, without any distinction ; and thus introduces into the philosophy of the human mind the same confusion as a mathematician would introduce into geometry by informing his pupils that all figures are circles. He did not intend to expunge the notion of mind from all philosophy. He meant to inculcate that there was an immaterial mind which reflected, as well as a material body which felt. But the consequence of his vague conceptions on the subject was that he employed language capable of different senses ; and accordingly the materialists Condillac, Helvetius, D'Holbach, and others, cited him as an authority in their favour.

Bhoojungrao.

V.—*History of Civilization.*

II. Stages through which the Church had passed at the Fifth Century; and benefits that it conferred on the European World.

1. When we consider, under a merely human aspect, the different revolutions which have been accomplished in the development of Christianity, from its origin to the fifth century, taking it only as a society, and not as a religious creed, we find that it has passed through three stages essentially distinct :—

1*st.*—In the earliest period, the Christian society presents itself as a simple association, arising from a common creed, from common sentiments. The first Christians congregated in order to enjoy amongst themselves an interchange of the religious emotions and convictions common to all their breasts. There was no settled system of doctrines, of rules, or of discipline, nor no body of persons invested with authority.

2*nd.*—There is no doubt that in every society that exists, however newly born or feebly constituted it may be, a moral power is perceptible, animating and directing it; so in the different Christian congregations, there were men who preached, taught, and morally governed the rest, but no superior or no discipline was regularly instituted: the primitive state of the Christian society was simply an association of persons drawn together by an identity of creed and sentiments. In proportion as it progressed, (and very speedily, for the marks are traceable in the earliest records,) a system of doctrines, of rules, of discipline, and of functionaries or magistrates, was brought out. Of the magistrates, some were called *Episcopoi*, or inspectors or watchers, who became bishops; others *Presbuteroi*, or ancients, who became the priests; and others *Diakonoi*, or deacons, charged with the care of the poor, and the distribution of the alms. It is also impossible to determine the precise functions of these different magistrates—the line of demarcation was probably very vague and fluctuating; but at all events the institutions had a commencement. This second epoch, however, had a predominant feature, which consisted in the control, the preponderance belonging to the body of the faithful. It was they who decided both as to the choice of dignitaries or magistrates; and as to the adoption as well of systems of discipline as of doctrine. The

Christian people were not as yet separated from the government of the church. They did not exist apart from or independently of each other; and the Christian people continued to exercise the principal influence in the society.

3rd.—In the third era everything was changed. A clergy was formed distinct from the people,—a body of priests having riches, jurisdiction, a constitution of their own,—in a word, a complete government, being in itself a regular society, furnished with all the means of existence independently of the society for whose behoof it was intended, and over which it extended its influence. This was the state in which the Christian church appeared at the commencement of the fifth century, and in the third stage of its constitution. The government was not completely taken out of the hands of the people, or separated from them; a system prevailed which is without any parallel, especially in religious affairs; but in the relations between the clergy and the flocks of the faithful, the clergy ruled almost without control.

2. The benefits which the church conferred upon European civilization are as follows: —

1st.—In the first place, an incalculable benefit resulted from the existence of a moral influence and force,—of a force which simply rested on moral convictions, persuasions, and opinions,—in the midst of that deluge of physical force which poured upon society at that epoch. If the Christian church had not been established, the whole world had been overborne by pure physical force. It alone exercised a moral power.

2nd.—It did more—it sustained and spread the idea of a rule or law which was superior to all human laws; it maintained, for the safety of humanity, that fundamental doctrine that there is above all human laws, a law, which, according to the spirit of the times and manners, is sometimes called reason, and sometimes Divine will, but which, at all periods, and in all places, is the same law under different designations.

3rd.—The church then originated a great fact, viz. the separation of the spiritual from the temporal power. This separation is the source of liberty of conscience. The separation between the temporal and spiritual powers is founded upon the principle that physical force has no right or influence over the

minds of men, or over conviction and truth. It results from the distinction established between the world of thought and that of action—between circumstances of an internal and those of an external nature. So that this maxim of liberty of conscience, for which Europe has struggled and suffered so much, and which has prevailed only so lately, often against the exertions of the clergy, was laid down under the name of a separation between temporal and spiritual power in the earliest stages of European civilization ; and its introduction and maintenance was owing to the Christian church being compelled, by the necessity of its situation, to defend itself against the barbarism of the times. The Christian church, therefore, shed upon the European world in the fifth century three essential blessings: the recognition of a moral influence, the upholding a Divine law, and the disjunction of temporal and spiritual power.

PURSHOTTUM NARAIN BHUT.

8th December 1853.

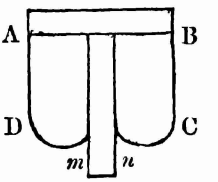
SENIOR CLASS, MATHEMATICAL DEPARTMENT.

Paper on Hydraulics.

Determine the quantity of water discharged by a small vertical or horizontal orifice, the time of discharge, and the height of the fluid in the vessel, when any two of these quantities are known.

Let A C D B (fig. 1) be the vessel filled with water, and let a represent the area of the small orifice $m\ n$, W the quantity of water discharged, and t the time of discharge, H the height of water in the vessel, and G the space described by gravitating force, which is known by experiment to be equal to $16\frac{1}{2}$ feet.

Fig. 1.



We have proved in dynamics that the times are as the square roots of the spaces, therefore

$$\sqrt{G} : \sqrt{H} :: 1^{\text{sec.}} : \sqrt{\frac{H}{G}}$$

Now since the velocity is uniform, the space described will be double in the time that a heavy body will describe through the height H, therefore a column of fluid equal to $a \,.\, 2$ H will be

discharged in time $\sqrt{\frac{H}{G}}$; and since the quantities of fluid discharged in different times are in proportion to the times

We have therefore $2\,a\,.\,H\;:\;W\;::\;\sqrt{\frac{H}{G}}\;:\;t$

$$\therefore\; 2\,a\,.\,H\,.\,t = W\,.\,\sqrt{\frac{H}{G}}$$

$$\text{Therefore } W = \frac{2\,a\,.\,H\,.\,t}{\sqrt{\frac{H}{G}}}$$

$$= \frac{2\,a\,.\,H\,.\,t\,.\,\sqrt{G}}{\sqrt{H}}$$

$$= 2\,a\,.\,t \times \sqrt{G\,.\,H}$$

$$\text{And therefore } a = \frac{W}{2\,t\,\sqrt{G\,.\,H}} \text{ and } t = \frac{W}{2\,a\,.\,\sqrt{G\,.\,H}}$$

And lastly, squaring both the sides of the 1st equation,

$$W^2 = 4\,a^2\,.\,t^2 \times G\,H$$

$$\text{Therefore } H = \frac{W^2}{4\,a^2\,t^2\,.\,G}$$

Hence determine the quantity of water W′ which is discharged in time t' from any other vessel in which A′ is the area of the orifice, and H′ the height of the fluid.

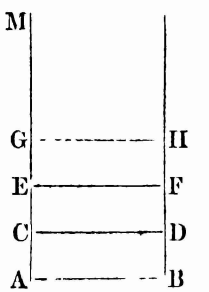
We have proved in the last proposition that $W = 2\,a\,.\,t\,.\,\sqrt{G\,.\,H}$, but in this expression G and H are constant quantities; we get therefore

$$W\;:\;W'\;::\;a\,\sqrt{H}\;:\;A'\,\sqrt{H'}$$

Consequently W varies as $a\,\sqrt{H}$.

NARRAIN GOPALL PUTWURDHUN.

Paper on Pneumatics.



Let M A B represent a column of air, whose A B rests upon the earth's surface; and let it be divided into strata of uniform thickness by the lines C D, E F, G H, which are so taken that the density of each stratum may be equable. Let the density of several strata be denoted by d, d', d'', &c. and the weight of the air by which they are pressed W, W′, W″, &c. We know that the densities of a fluid vary according to the

weights by which it is pressed, we have therefore $d : d' :: W : W'$, and $d' : d'' :: W' : W''$, and so on.

Now the weights of equal columns of fluid are in proportion to their densities, hence $d : d'$ :: the weight of the stratum C D : the weight of the stratum E F.

The weight of the stratum C D is W—W′, for it is granted that the density through the whole stratum is equable; the lowest part A B of the stratum C D is pressed by the weight W, and for the same reason the lowest part C D of the next above stratum E F is pressed by the weight W ; therefore the difference between W and W′ is the weight of the stratum C D. In like manner it can be shown that the weight of the stratum E F is W′—W″, and that of the stratum C H, W″ — W‴, and so on.

Therefore $d : d' :: W - W' : W' - W''$

And $d' : d'' :: W' - W'' : W'' - W'''$.

But it is shown above—

$d : d' :: W : W'$, and $d' : d'' :: W' : W''$

$\therefore W : W' :: W - W' : W' - W''$ and $W' : W'' :: W' - W'' : W' - W''$.

By alternation $W : W - W' :: W' : W' - W''$, and $W' : W' - W'' :: W'' : W'' - W'''$.

$\therefore W : W' :: W' : W''$, and $W' : W'' :: W'' : W'''$ by division.

But $d : d' :: W : W'$, and $d' : d'' :: W' : W''$.

$\therefore d : d' :: d'' : d'''$, and so on.

6. Prove that the velocity with which air flows out from a vessel is always constant.

Let P be the pressure of the atmosphere, which is equal to the initial expelling force. Let D be the initial density, and V the initial velocity. Let p be the pressure of the atmosphere at the end of the time of eflux, and d be the density at that time, and v be the velocity at that time.

Now since $D : d :: P : p \therefore p = \frac{P \cdot d}{D}$

Now since forces are proportional to the quantities of motion which they produce, and the quantities of motion are proportional to the quantities of matter and the velocities jointly, therefore

We have $P : p :: M V : m v$

In this proportion M and m are taken to represent the quantities of matter at the beginning and at the end of the eflux, but the quantities of matter which escape through a given orifice are as the densities and velocities jointly ; we have therefore—

$$M : m :: D V : d v.$$

Multiplying the antecedents by V, and consequents by v, we get—

$$M V : m v :: D V^2 : d v^2$$

But we had $P : \frac{P \cdot d}{D} :: MV : m v$

$$\therefore P : \frac{P \cdot d}{D} :: D V^2 : d v^2 \therefore P \cdot d v^2 = P \cdot d \cdot \frac{D \cdot V^2}{D}$$

$$\therefore P. d. v^2 = P. d. V^2 \therefore v^2 = V^2 \therefore v = V.$$

Hence the velocity at the beginning and at the end of the eflux is the same.

GUNNESH NARRAYEN PURRANJPEH.

COLLEGE DIVISION.—JUNIOR CLASS.

Mathematical Paper.—Spherical Trigonometry.

To determine the cosine of an angle of a spherical triangle in terms of the sines and cosines of the sides.

Let A B C (fig. 1) be a spherical triangle, and D the centre of the sphere.

From A draw A E, A F tangents to A B and A C respectively ; also draw D E, D F secants to A B, A C respectively.

Now in the triangle D E F—

$$E F^2 = E D^2 + D F^2 - 2 E D . D F . \cos E D F$$
$$= \sec^2 A B + \sec^2 A C - 2 \sec A B . A C . \cos B C \quad . (1)$$

Also in the triangle A E F—

$$E F^2 = A E^2 + A F^2 - 2 A E . A F . \cos E A F$$
$$= \tan^2 A B + \tan^2 A C - 2 \tan A B . A C . \cos A \quad . . (2)$$

By comparing equation (1) with equation (2) we have—

$$\sec^2 A B + \sec^2 A C - 2 \sec A B . A C . \cos B C = \tan^2 A B + \tan^2 A C - 2 \tan A B . A C . \cos A$$

But $\sec^2 = 1 + \tan^2$

$$\sec = \frac{1}{\cos}$$

$$\tan = \frac{\sin}{\cos}$$

$$1 + \tan^2 A\,B + 1 + \tan^2 A\,C - 2\,\frac{1}{\cos A\,B}\,\frac{1}{\cos A\,C}\,.\cos B\,C = \tan^2 A\,B + \tan^2 A\,C - 2\,\frac{\sin A\,B}{\cos A\,B}\,\frac{\sin A\,C}{\cos A\,C}\cos A$$

By cancelling we have—

$$2 - 2\,\frac{1}{\cos A\,B}\,\frac{1}{\cos A\,C}\cdot\cos B\,C = -2\,\frac{\sin A\,B}{\cos A\,B}\cdot\frac{\sin A\,C}{\cos A\,C}\cdot\cos A$$

Divide both sides of the equation by 2.

$$1 - \frac{1}{\cos A\,B}\,\frac{1}{\cos A\,C}\cdot\cos B\,C = -\frac{\sin A\,B}{\cos A\,B}\cdot\frac{\sin A\,C}{\cos A\,C}\cdot\cos A$$

$$1 - \frac{1}{\cos A\,B}\,\frac{1}{\cos A\,C}\cdot\cos B\,C = -\frac{\sin A\,B}{\cos A\,B}\cdot\frac{\sin A\,C}{\cos A\,C}\cdot\cos A$$

Reduce the first term of the equation to an improper fraction.

$$\frac{\cos A\,B\cos A\,C - \cos B\,C}{\cos A\,B\cos A\,C} = -\frac{\sin A\,B}{\cos A\,B}\cdot\frac{\sin A\,C}{\cos A\,C}\cdot\cos A$$

Multiply both sides of the equation by cos A B. cos A C.

$$\cos A\,B\,.\cos A\,C - \cos B\,C = -\sin A\,B\,.\sin A\,C\,.\cos A$$

$$\text{Or}\quad \frac{\cos B\,C - \cos A\,B\cos A\,C}{\sin A\,B\,.\sin A\,C} = \cos A$$

Hence—

$$\frac{\cos A\,C - \cos A\,B\cos B\,C}{\sin A\,B\,.\sin B\,C} = \cos B$$

$$\frac{\cos A\,B - \cos A\,C\,.\cos B\,C}{\sin A\,C\,\sin B\,C} = \cos C$$

To express the sine of an angle of a spherical triangle in terms of the sines of the sides of the triangle.

We have—

$$\cos A = \frac{\cos B\,C - \cos A\,B\,.\cos A\,C}{\sin A\,B\,.\sin A\,C}\left\{\begin{array}{l}\text{Let } B\,C = a\\ A\,B = c\\ A\,C = b\end{array}\right.$$

$$= \frac{\cos a - \cos b\,.\cos c}{\sin b\,\sin c}\Big\}\ \text{Add unity to both sides.}$$

$$1 + \cos A = 1 + \frac{\cos a - \cos b\cos c}{\sin b\,\sin c}$$

$$= \frac{\cos a - \cos b\cos c + \sin b\sin c}{\sin b\,\sin c}$$

$$= \frac{\cos a - (\cos b\,.\cos c - \sin b\,\sin c)}{\sin b\,\sin c}$$

$$= \frac{\cos a - \cos(b + c)}{\sin b\,\sin c}$$

$$= \frac{2 \sin \frac{a+b+c}{2} \sin \frac{b+c-a}{2}}{\sin b \sin c}$$

Let $S = \frac{a+b+c}{2}$ $\quad S - c = \frac{a+b-c}{2}$

$\therefore S - a = \frac{b+c-a}{2}$

$S - b = \frac{a+c-b}{2}$

$$\therefore 1 + \cos A = \frac{2 \sin S \sin (S-a)}{\sin b \sin c} \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (1)$$

Again, resuming the expression for cos A—

$$\cos A = \frac{\cos a - \cos b \cos c}{\sin b \sin c}$$ } Subtract both sides from unity.

$$1 - \cos A = 1 - \frac{\cos a - \cos b \cos c}{\sin b \sin c}$$

$$= \frac{\cos b \cos c + \sin b \sin c - \cos a}{\sin b \sin c}$$

$$= \frac{\cos (b-c) - \cos a}{\sin b \sin c}$$

$$= \frac{2 \sin \frac{a+b-c}{2} \sin \frac{a+c-b}{2}}{\sin b \sin c}$$

$$= \frac{2 \sin (S-c) \sin (S-b)}{\sin b \sin c} \quad \ldots \quad \ldots \quad \ldots \quad (2)$$

Multiplying equations (1) and (2).

$$1 - \cos^2 A = \frac{4 \sin S \sin (S-a) \sin (S-b) \sin (S-c)}{\sin^2 b \sin^2 c}$$

$$1 - \cos^2 A = \sin^2 A$$

$$\sin^2 A = \frac{4 \sin S \sin (S-a) \sin (S-b) \sin (S-c)}{\sin^2 b \sin^2 c}$$

Extracting the square root—

$$\sin A = \frac{2}{\sin b \sin c} \sqrt{\sin S \sin (S-a) \sin (S-b) \sin (S-c)}$$

Hence—

$$\sin B = \frac{2}{\sin a \sin c} \sqrt{\sin S \sin (S-a) \sin (S-b) \sin (S-c)}$$

$$\sin C = \frac{2}{\sin a \sin b} \sqrt{\sin S \sin (S-a) \sin (S-b) \sin (S-c)}$$

GOVIND JAGANNATH.

1. To find the equation to the Parabola.

A parabola is the locus of a point whose distance from a given point and from a straight line given in position is always constant.

In this figure let S (fig. 2) be the given point, and R r be the straight line given in position.

Draw S o perpendicular to R r, and bisect S o in A, then A will be a point in the parabola.

Take P any point in the curve, and join SP.

From the point P draw P M and P m perpendicular and parallel to R r, and from the point A draw A y perpendicular to the axes A x.

Let A be the origin, A x and A y the axes of co-ordinates.

Now let A S $= a$, A M $= x$, and P M $= y$.

Now S P $=$ P Y by the definition of the parabola.

P m $=$ A O $+$ A M $= a + x$ $\therefore$ S P $= a + x$.

$S P^2 = P M^2 + S M^2$

$= y^2 + (x - a)^2$ $\therefore$ S P $= \sqrt{y^2 + (x - a)^2}$

$\therefore a + x = \sqrt{y^2 + (x - a)^2}$

Squaring both sides of this equation we get—

$a^2 + 2 a x + x^2 = y^2 + x^2 - 2 a x + a^2$

$\therefore 4 a x = y^2$, which is the equation to parabola.

Polar equation to the parabola.

Let A be the pole, and S P radius vector.

Call $\angle$ P S A $= \theta$, S P $= r$ and P M $= y$

Now in the triangle P S M, S P $= 2 a +$ S M

$\therefore r = 2 a + r \cos$ P S M, but cos P S M $= -$ cos P S A

$\therefore r = 2 a - r \cos \theta$ $\therefore r + r \cos \theta = 2 a$

$\therefore r (1 + \cos \theta) = 2 a$ $\therefore r = \frac{2 a}{1 + \cos \theta}$

But $1 + \cos \theta = 2 \cos^2 \frac{\theta}{2}$

$\therefore r = \frac{2 a}{2 \cos^2 \frac{\theta}{2}} = \frac{a}{\cos^2 \frac{\theta}{2}}$ which is the equation.

2. To find an equation to the Ellipse.

An ellipse is the locus of a point whose distance from two given points is equal to a constant quantity.

Suppose S and H (fig. 3) be the two given points, join S H, bisect S H in C.

Let P be any point in the curve.

Join S P and H P.

Draw P M perpendicular to A′ A and C Y to A′ A.

Take C to be the origin, C A and C Y the axes of co-ordinates.

Take S P + H P = 2 a, S P = r', H P = r, C M = x, P M = y, and C S or H C = C. But $\frac{C}{a} = e$ ∴ C = $a\,e$ ∴ C S = $a\,e$

Now H P^2 or r^2 = H M^2 + P M^2 = $(a\,e + x)^2 + y^2$, and

S P^2 or r'^2 = S M^2 + P M^2 = $(a\,e - x)^2 + y^2$

∴ $r^2 + r'^2 = 2\,(a^2\,e^2 + x^2 + y^2)$, and $r^2 - r'^2 = 4\,a\,e\,x$

Again $r + r' = 2\,a$, and $(r + r') \times (r - r') = 4\,a\,e\,x$

∴ $r - r' = 2\,e\,x$ ∴ $r = a + e\,x$, and $r' = a - e\,x$

Now $r^2 = a^2 + 2\,a\,e\,x + e^2\,x^2$

And $r'^2 = a^2 - 2\,a\,e\,x + e^2\,x^2$

Then by addition we have $r^2 + r'^2 = 2\,(a^2 + e^2\,x^2)$

But $r^2 + r'^2 = 2\,(a^2\,e^2 + x^2 + y^2)$

∴ $2\,(a^2 + e^2\,x^2) = 2\,(a^2\,e^2 + x^2 + y^2)$

Dividing by 2 we get $(a^2 + e^2\,x^2) = (a^2\,e^2 + x^2 + y^2)$

∴ $y^2 = a^2\,(1 - e^2) - x^2\,(1 - e^2) = (a^2 - x^2) \times (1 - e)^2$

But $(1 - e^2) = 1 - \frac{C\,S^2}{a^2} = \frac{a^2 - C\,S^2}{a^2} = \frac{b^2}{a^2}$ ∴ $y^2 = \frac{b^2}{a^2} \times (a^2 - x^2)$, which is the required equation.

To find an equation to the ellipse, referred to the vertex as origin.

Then A M = x^2 ∵ $x = x' - a$

∴ $x^2 = x'^2 - 2\,x'\,a + a^2$ ∴ $2\,a\,x' - x'^2 = a^2 - x^2$

But $y^2 = \frac{b^2}{a^2}\,(a^2 - x^2)$ ∴ $y^2 = \frac{b^2}{a^2} \cdot (2\,a\,x' - x'^2)$, which is the required equation.

Let us suppose that C be the pole, and the angle P C M = θ,

But $y^2 = \frac{b^2}{a^2}\,(a^2 - x^2)$

∴ $\frac{y^2}{b^2} + \frac{x^2}{a^2} = 1$, but $r^2 = y^2 + x^2 = r^2 \sin^2\theta + r^2 \cos^2\theta$

For $y^2 = r^2 \sin^2\theta$, and $x^2 = r^2 \cos^2\theta$

∴ $r^2 = r^2 \sin^2\theta + r^2 \cos^2\theta$

∴ $\frac{r^2 \sin^2\theta}{b^2} + \frac{r^2 \cos^2\theta}{a^2} = 1$

∴ $r^2\,(a^2 \sin^2\theta + b^2)\,(\cos^2\theta) = a^2\,b^2$

$\therefore r^2 = \dfrac{a^2 b^2}{a^2 \sin^2 \theta + b^2 \cos^2 \theta}$

Therefore r itself $= \dfrac{a\,b}{\sqrt{a^2 \sin \theta + b^2 \cdot \cos^2 \theta}}$, which is the equation.

To find the equation to the ellipse when focus being the pole.

S P $= 2a - r$ and S P^2 = P M^2 + S M^2 = $y^2 + (2ae + S M)^2$

But P $M^2 = r^2 \cdot \sin \theta$ and S $M^2 = r^2 \cdot \cos^2$ P·S M $= -\, r^2 \cos^2 \theta$ $\therefore$ S M $= -\, r \cdot \cos \theta$

$\therefore (2a - r)^2 = (2ae + r \cdot \cos \theta)^2 + r^2 \cdot \sin^2 \theta$

$\therefore 4a^2 - 4ar^2 + r^2 = 4a^2 e^2 + 4aer \cdot \cos \theta + r^2 \cdot \cos^2 \theta + r^2 \cdot \sin^2 \theta$

But $\cos^2 \theta + \sin^2 \theta = 1$

$\therefore 4a^2 - 4ar + r^2 = 4a^2 e^2 + 4aer \cdot \cos \theta + r^2$

$\therefore a^2 - ar = a^2 e^2 + aer \cdot \cos \theta$

(*e. i.*) $r + aer \cdot \cos \theta = a^2 - a^2 e^2$

$\therefore r (1 + e \cos \theta) = a - ae^2$

$\therefore r (1 + e \cos \theta) = a (1 - e^2)$

$\therefore r = \dfrac{a (1 - e^2)}{1 + e \cos \theta}$, which is the equation.

WASOODEO NARRAIN.

COLLEGE DIVISION.

Vernacular Essay.

प्रामाणिकपणा आणि सत्य ह्यांपासून जे लाभ होतात त्यांविषयीं.

ह्या जगांत जे अनेक व्यवहार चालले आहेत, त्यां सर्वांमध्यें सत्य आणि प्रामाणिकपणा ह्यांवांचून चालणारा असा कोणताही व्यवहार नाहीं. प्रामाणिकपणा म्हणजे विश्वासानें व इमानानें वागणें. आणि सत्य म्हणजे कोणत्याही गोष्टीचें यथार्थ स्वरूप. सर्व कर्मांमध्यें सत्यास अनुसरून असावें ही गोष्ट मोठ्या महत्वाची होय; कारण, आपण एखादी गोष्ट पाहिली किंवा ऐकिली असून, जर ती पाहिल्याप्रमाणें किंवा ऐकल्याप्रमाणें सांगितली नाहीं, आणि भलत्याच रूपानें लोकांस भासविली तर त्या सांगण्यापासून त्यांच्या मनाचा भलताच ग्रह होतो,

व त्यामुळें त्यांच्या हातून मोठे अनर्थही घडतात. पाहा, एखाद्या लबाड मनुष्यानें आपणांस येऊन सांगितलें कीं तुम्ही अमक्या मनुष्यावर फार विश्वास ठेवितां खरा, पण मला त्यानें सांगितलें त्यावरून असें वाटतें कीं तो तुमचा कधीं नाहीं कधीं तरी घात करीलच करील. आतां हें भाषण ऐकून त्या मनुष्याच्या विश्वासूकपणाविषयीं आपल्या मनांत संशय येणार नाहीं काय ? व आपल्या हातून कदाचित् त्या बिचाऱ्याचें निष्कारण वाईट होणार नाहीं काय ? प्रामाणिकपणापासून आपणांस व आपण ज्यांशीं प्रामाणिकपणानें वागतों त्यांसही फार लाभ होतात. यजमानांशीं चाकर लोक प्रामाणिकपणानें वागून निष्कपटपणें त्यांचीं कामें करीत असले म्हणजे त्यांवर यजमानाचा लोभ होतो, व त्यांच्या हातूनही यजमानाचें कल्याण होतें. तसेंच, लोकांच्या बंदोबस्ताकरितां सरकार जे मोठ-मोठे कामदार नेमितें, ते जर सत्य स्मरून इमानानें आपलें कर्त्तव्य कर्म करूं लागले तर त्यापासून त्यांस मोठी कीर्ति प्राप्त होते. व ते मोठया पदवीस चढतात, आणि त्यांच्या हातून लोकांचेंही कल्याण होतें.

व्यापारी लोकांसही प्रामाणिकपणाची फार गरज आहे. पाहा, एखाद्या कारागिरास आपण कांहीं काम करायास सांगितलें, व त्यानें कांहीं दिवसांची मुदत मागून घेऊन तें काम पतकरलें ; आणि जर ती मुदत संपल्यावर करारप्रमाणें काम तयार करून दिलें नाहीं तर आपला त्याचा कज्जा होतो, व पुनः आपणांस त्यापासून काम करून घ्यावेंसें वाटत नाहीं. ह्याप्रमाणें त्याचा आणि आपलाही तोटा होतो. असत्य भाषणा पासून समयविशेषीं तोटा होत नसला, व उलटा नफा जरी होत असला, तरी देखील तें करूंनये; कारण, परमेश्वरानें ही जिव्हा आपणांस सत्य भाषण करण्याकरितांच दिली आहे, व आपण इहलोकीं ही कोणत्या कामास लाविली ह्याचा जाब देवापाशीं आपण दिला पाहिजे. ह्याकरितां असत्य भाषणानें इहलौकिक क्षणिक हित साधून चिरकाल राहणाऱ्या पारलौकिक सुखाची आपण हानि करून घेऊं नये.

कित्येक मनुष्य एखादी सामान्य गोष्ट सांगूं लागले तरी तिचें लोकांस आश्चर्य वाटावें म्हणून निरर्थक, अत्यद्भुत, विस्मयावह, विलक्षण, अतोनात, इत्यादि शब्दांचा प्रयोग करून ती वाढवून सांगतात. वस्तुतः पाहिलें असतां जरी ह्या भाषणापासून लोकांचा कांहीं घातपात होत नाहीं तरी असें केल्यानें असत्याकडे आपली प्रवृत्ति होण्याचा संभव आहे, म्हणून असलें भाषणही करीत जाऊ नये.

सारांश, सर्व लोकांनीं सर्व कामांत व सर्व प्रसंगीं सत्य बोलावें, म्हणजे त्यांचें व त्यांचे हातून दुसऱ्यांचेंही कल्याण होईल ह्यांत संशय नाहीं.

भाऊ पाईटकर.

APPENDIX D.

VARIOUS RETURNS.

Table of Stipendiary, Paying, and Free Students in the Poona College on the 31st December 1853.

No.	Department.	Stipendiary.	Paying.	Free Students.	Total Number in each Department.	Average Attendance.
1	Sanscrit Department	10	4	107	121	91
2	English Department	38	123	177	338	290
3	Normal Department	20	...	...	20	20

Table of Castes of Students of the English Department of the Poona College.

Bráhman.	Shenvi.	Kásta.	Sutár.	Sonár.	Parbhu.	Shudra.	Khatriya.	European, Portuguese &c.	Pársi.	Wáni.	Guzar.	Pardeshi.	Mussulman and Bheel.	Tailang and Kongádi	Gosávi.	Támbat.
278	2	2	2	2	16	19	...	5	5	1	1	..	1	3	...	1

Return of Students in the College and School Divisions of the English Department on 31st December 1853.

College Division.	Senior Class under the Principal	27
	Junior Class under ditto	18
	Senior Class under the Professor of English Literature..	4
	Junior Class under ditto	20
	Senior Class under the Professor of Mathematics..	5
	Junior Class under ditto	14
School Division		310

APPENDIX No. XIX.

ANNUAL REPORT

OF THE

GRANT MEDICAL COLLEGE,

FOR THE SESSION 1853-54.

ANNUAL REPORT

OF THE

GRANT MEDICAL COLLEGE,

BOMBAY.

EIGHTH YEAR.—SESSION 1853-54.

Bombay:
PRINTED AT THE
BOMBAY EDUCATION SOCIETY'S PRESS.

1854.

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ANNUAL REPORT

OF THE

GRANT MEDICAL COLLEGE,

BOMBAY.

EIGHTH YEAR.—SESSION 1853-54.

ESTABLISHMENT OF PROFESSORS DURING THE SESSION.

Principal, and Professor of the Institutes and Practice of Medicine	C. MOREHEAD, M.D.
Professor of Anatomy and Surgery	J. PEET, Esq. (Absent on sick certificate.) Returned March 4th, 1854.
Acting ditto	G. R. BALLINGALL, M.D.
Professor of Chemistry and Materia Medica	H. GIRAUD, M.D.
Professor of Midwifery	R. PEELE, Esq. (Absent on sick certificate.)
Acting ditto	W. C. COLES, M.D.
Professor of Medical Jurisprudence.....	W. C. COLES, M.D.
Curator of the Museum	G. R. BALLINGALL, M.D.

Opening of the Session.

1. THE Eighth Session of the College was opened on the 15th of June 1853. The Introductory Address on the occasion was delivered by the Principal of the College.

2. Shortly before the commencement of the Session, Dr. Watson, the Curator of the Museum, was from failing health under the necessity of resigning his duties and proceeding to Europe on sick certificate. Dr. Ballingall was appointed his successor in the charge of the Museum. Early in the month of March last Mr. Peet returned from sick leave, and resumed his appointment of Professor of Anatomy and Surgery, the duties of which had, during his absence, been performed with ability by Dr. Ballingall.

Changes in the Professors.

3. At the close of the month of April 1853, twelve Candidates for admission into the College were examined: of these eight were found qualified.

Admission of Students.

4. Twenty-seven Students, twenty-eight Student Apprentices, and ten Warrant Officers and Hospital Assistants,—in all sixty-five Pupils,—have attended the College for instruction during the Session.

Attendance of Students.

5. The courses of Lectures, and the general system of education, have been conducted in the manner which has already been so fully detailed in former Reports, and which it is unnecessary at present again to describe.

Lectures.

6. Seven Students presented themselves for First Examination Certificates: of these five were found qualified, viz. A. M. Continho, Cooverjee Dorabjee, Burjorjee Ardaseer, and Dheerajeeram Dulpatram.

Diploma Examination.

7. The final examination has been conducted by Dr.

McLennan, the Government Examiner; Mr. Stovell, Dr. Arbuckle, and Dr. Campbell, Government Assessors.

Five Candidates presented themselves for examination, and four of them were found qualified :—

Ruttonjee Hormusjee.	Moreshwar Junardhan.
Shamrao Narayen.	Balchristna Saccaram.

Award of Scholarships.

8. Scholarships have been awarded to the following Students :— A. M. Continho, M. A. Misquita, Rustomjee Merwanjee, Cowasjee Nowrojee, Cursetjee Framjee, Jumnadass Hurgovindass, A. P. D. Andrade, and Rustomjee Cowasjee. The Sir Jamsetjee Jejeebhoy Medical Prize was awarded by the Government Examiner to Ruttonjee Hormusjee.

Warrant Medical Officers.

9. Nine Warrant Medical Officers and Hospital Assistants have been examined; to eight of them the Certificate of Qualification for promotion to the grade of Apothecary has been granted, viz :—

Mr. Anderson, } Hospital Stewards.
Mr. Wilson, }

Mr. Hudson, }
Mr. Thompson, }
Mr. Brooks, } Assistant Apothecaries.
Mr. Douglas, }
Mr. Rozario, }

Mr. Francis St. Francis, 1st Hospital Assistant.

Student Apprentices.

10. Five Student Apprentices have been examined for Certificate of Qualification; of these four were successful :—

Vincent De Souza.	P. Drumm.
E. Heffernan.	J. Sinclair.

Burnes Medal.

The Burnes Medal, presented by the Masonic Brethren of Bombay, has been awarded to V. DeSouza.

Physician General's Prizes.

11. Four Prizes were placed at the disposal of the College by the Physician General, for the encouragement and reward of the Student Apprentices, and of the best Candidates on admission. These Prizes have been awarded to J. Kinlock, J. Silvester, Dhunjeebhoy Cowasjee, and P. Grogan. The last named Apprentice received the Prize for his qualifications at the examination for admission into the College. He is now no longer in the Medical Department of the Service.

Warrant Medical Officers' Prizes.

12. In January last, a letter was received from the Warrant Medical Officers at the Presidency, expressing their wish to present Prizes to the two best Second Year Student Apprentices. This is the second occasion on which the Warrant Medical Officers at the Presidency have, by their considerate liberality, evinced a praiseworthy desire to encourage the development of industrious habits in the juniors of their department.

These Prizes have been awarded to H. Washington and S. Cavenagh: the merits of these two Student Apprentices are so equal that the Examiners have been unable to give the preference to either.

Willoughby Prize.

13. The Willoughby Prize was again opened for competition to the Graduates of the College on the same terms as those formerly notified. It is with great regret that I have a second time to report that no competitors for this Prize have appeared.

14. The completion and suitableness of the Lying-in Hospital have been already reported. During the Session several admissions of interest and importance have taken place, but as yet the numbers have been few.

Sir Jamsetjee Jejeebhoy Obstetric Institution.

There is, however, every reason to hope, that in the course of time, as the existence and advantages of this important adjunct to the Hospital become better known to the community, it will be more freely and frequently resorted to.

15. To the attention of the Medical Officers in different parts of the Presidency the Museum is indebted for several valuable contributions. It is with much satisfaction that intelligence has lately been received by us, that a portion of the wax models sanctioned by the Honorable Court of Directors has left England, and may be expected here before the opening of the next Session. These models are duplicates of part of the celebrated collection in the Museum of Guy's Hospital—a collection formed by the ability, ingenuity, and taste of Mr. Towne. This gentleman is at present earnestly engaged in reproducing the most useful of the beautiful specimens of his art for the Museums of the three Indian Medical Colleges.

Museum.

16. In the Report of the College for the Session 1847-48 notice was taken of the advantage that would result to the departments of Materia Medica and Botany by the well-arranged cultivation of a part of the College compound.

College Compound.

This suggestion did not at the time meet with the approval of Government; but I would again venture to propose it for consideration, on the additional grounds that

the College has now nearly assumed the form of a perfectly organized Medical School; that this addition may be effected at a small cost; that it will provide illustrations for instruction in Botany for the other educational institutions of the Presidency; and that it will tend to improve and refine the general tastes of the Students.

Grant College Medical Society.

17. The proceedings of the Grant College Medical Society continue to be conducted with spirit and success. The meetings have regularly taken place, and the Medical Book Club formed in connection with the Society gives its Members the opportunity of keeping pace with the discoveries and improvements in Medical Science in Europe and other countries. The attention of the Society has been called by the Medical Board to the limited extent to which Vaccination is practised in Bombay, and the co-operation of the Members in furtherance of this most important sanitary measure was solicited. The subject was taken into immediate consideration. The Graduates of the College at present resident in Bombay willingly assented to use their best endeavours to establish places of Vaccination in different populous parts of the Native Town. A detailed system of operations was arranged, the particulars of which will be found in the Appendix to this Report.

Difficulties have been experienced in reducing this system to practice, and little good has been as yet achieved. Still I encourage the sanguine hope that the Graduates of the College are so impressed with the importance of Vaccination to the welfare of their countrymen, that the difficulties which have arisen will serve merely to strengthen their energy, and quicken their zeal.

18. To complete the establishment of the College, two additional Professorships are required—one of Anatomy and Physiology, the other of Materia Medica.

Professors of Anatomy and Materia Medica.

These appointments have been recommended by the Government of India, and it is to be hoped that the sanction of the Honorable Court may be received before the commencement of another Session.

The College will then be organized in accordance with the requirements of the examining Boards of the United Kingdom, and we may anticipate that its courses of Lectures will be recognized by them.

19. It is useful from time to time to bring before our minds the objects had in view in the formation of our Institutions, and to note to what extent they have been realized.

Remarks on the objects of the College.

It is well known that the leading idea in the mind of the distinguished Founder of this College was to give to the people of Western India a practically and well-trained body of Medical Practitioners, who, by the skilful and conscientious exercise of their art, would so recommend themselves to their countrymen, as in time to take the place of the Hakeems and Weids, who, from want of adequate education, must necessarily be incompetent to exercise the healing art with safety and success.

Education of Native Medical Practitioners.

The College has now been eight years in active operation; but it is only during the last four that it has been in that degree of maturity which admitted of its yielding

practical results. During these four years twenty Graduates have received the Diploma of the College; two have been finally rejected as unqualified.

Of the Graduates one has died; of the remaining nineteen, nine are engaged in private practice in the Town of Bombay. It is known to me on good authority that all these young Medical men are realizing incomes equal to their reasonable expectations, and greater in amount than they would have received had they accepted or continued in the service of Government as Sub-Assistant Surgeons.

I have reason further to believe that the *practice* which they have gained has been lost by those classes of irregular Practitioners of different castes, the evils of whose incompetency it was the object of this College to remove. Thus, then, there is no avoiding the conclusion that the object which Sir Robert Grant had in view has, as regards the populous town of Bombay, been in the short space of four years in a great measure achieved.

But the ameliorating influence of this Institution was not to be confined within the limits of this island, but was to be made operative over the whole extent of the Presidency.

This end, however, will be gained by a slower process. The inhabitants of the large towns in the interior are not as yet familiar with the advantages of the art of Medicine as practised by educated men.

The Government, aware of this, have sanctioned schemes of dispensary relief for the district towns.

These institutions are to be under the charge of Graduates of the College, under the title of Sub-Assistant Surgeons: they, by gratuitous advice and medicines given to the poorer classes who resort to the dispensary, will have the opportunity of gradually familiarizing all classes of the

community with the usefulness of the art which they exercise, and by their residence in the town they will be in a position to give their assistance to those better classes of the people who are able and willing to pay for Medical attendance. Such is the occupation in view for the ten remaining Graduates who have accepted Sub-Assistant Surgeoncies, and for those who in future may join the list.

As yet there has been little progress made in introducing, in the manner which has just been explained, a scientific system of Medical practice into the towns of the interior of this Presidency. Yet a very little reflection must lead to the conclusion that the improved means of internal communication which are contemplated, or are in active progress, must at no remote period so enlarge the intelligence and enterprise of the inhabitants of the chief district towns, as to produce a desire for the advantages and comforts of more civilized communities; and thus a knowledge of the benefits resulting from a scientific art of medicine, and a demand for its exercise, will probably arise in the interior towns of this Presidency, at a period much earlier than a few years ago could possibly have been anticipated.

Improvement of the Government Subordinate Medical Establishment.

20. Such, then, was the object for which this College was established, and the extent to which it has been realized. But the usefulness of the College has not been confined to this object alone. The Government maintains a Subordinate Medical Establishment, for the performance of duties in the Military, Naval, and Civil departments of the public service. The judicious training of the members of this establishment is of much importance, as regards their usefulness and efficiency. Rules have been lately framed by the Medical Board for

the education and examination in this College of the European branch of the Subordinate Medical Department. During the last three years, about thirty pupils of this class have been annually borne on the rolls, and the Certificate of Qualification for promotion to the higher grades of the department has, after adequate examination, been given to twenty-seven individuals.

Importance of Clinical Instruction.

21. There are still some observations which seem to me of interest, not only to this College, but to Medical education in general, which I am desirous of recording before bringing this Report to a close.

In the Appendix to the last Report of the College, a detailed statement was given of the system of Clinical instruction and examination followed in this Institution.

This course was adopted with the view of placing distinctly on record the details of a most important department of Medical education. The hope was also entertained, that it might be of use to the Medical Schools in Great Britain and other countries, in many of which Clinical instruction is undoubtedly defective.

It is true that the system of education followed in the Indian Medical Colleges is based on that of the Medical Schools of Europe; but there is one fact which should be always borne in mind—it is that the Profession of Medicine, and the institutions which relate to it, have existed for many years in European countries, and that the laws by which they are governed, and the rules by which they are regulated, are characterized more or less by the imperfections of a less enlightened age. We, therefore, who are here engaged in introducing the Profession of Medicine

into a new country, ought to be careful that our veneration for the time-honoured institutions of our native land does not lead us to copy their defects as well as their excellences.

Impressed by reflections of this kind, it has always seemed to me that they who have been entrusted with the introduction of Medical education into India do not rightly estimate their position, if they are satisfied with a servile imitation of the systems at present followed in European schools, or if they evince any hesitation in the expression of independent opinion, which opportunities and experience may have enabled them to form, and entitled them to entertain.

And now I would observe, that success cannot be said to attend the efforts made by the Indian Government to establish Medical education, unless the Graduates, on leaving the schools, are qualified for the safe and successful practice of Medicine and Surgery. If they are so, they will in a reasonable time acquire the confidence of the community, and be preferred to irregular and unqualified practitioners. This is the true test of the efficiency or not of the system of instruction followed in our Indian Medical Schools.

It was the object of my Report on the Clinical system of this College to show that the possession or not of this ability, on the part of our Graduates, to practise Medicine, must be contingent on the efficiency of the Clinical system of instruction; and that the only way in which its possession can be proved is the test of an adequate Clinical examination.

It cannot be too frequently inculcated, more particularly on the non-professional public, that the mind may be stored with facts of chemistry, anatomy, physiology, and materia medica, and yet be a perfect blank as regards that kind of

knowledge which fits for the safe practice of the art of healing. This fitness can only be acquired by actual patient continuous observation of disease, and of the action of remedies at the bed-side of the sick, and by applying there, in their proper place and order, the necessary facts previously acquired of the elementary branches of Medical science which have just been named. It is to this that the term Clinical instruction is applied. Upon the manner in which it is conducted, the usefulness and efficiency of a Medical School mainly depend.

It has been already observed that Medical Schools in Europe are frequently defective in this important part of education; yet there are very many excellent practitioners of Medicine in these countries. The truth is, that they acquire their practical knowledge, not by the Clinical training of teachers, but by self Clinical education, either when students, or after they have left the Schools, and been pronounced qualified to practise Medicine. Now the question may, perhaps, be asked—May we here not be satisfied with the same defective system, and trust to after self-education to make up for the imperfections of scholastic training? Most assuredly not. In an introductory lecture at the opening of the Session, I ventured to express very freely my belief that the young men, natives of this country, educated at our Schools and Colleges, had as yet no appreciation of the importance of after self-education in the formation of character, in the development of the mind, and the fitting it for the useful exercise of its faculties in the affairs of life: that the general idea was, that with School or College education ended.

That with the lapse of time, with the extension of education, and other means of civilization and enlightenment,

delusions such as these will pass away, and a future will come when they shall have been thoroughly dispelled, is a proposition, I apprehend, which may be safely maintained. But in our present educational system we must take the Native mind as we at present find it, and take care that the knowledge we impart in our institutions is useful and practical, fit and sufficient for immediate application to the affairs of life; and that we place no reliance on the expectation that the defects of our Schools may be remedied by the spontaneous efforts of the matured minds of our students.

For reasons such as these, a defective system of Clinical instruction, a great imperfection in any School, must necessarily be fatal to the success and efficiency of an Indian Medical College.

22. This remark brings me to the concluding observations which I am desirous of making.

For the efficiency of Medical Schools, it is necessary that the numbers do not exceed the Clinical means.

Clinical instruction must be conducted in the wards of an hospital. There must be always, then, a relation between the size of an hospital and the number of pupils which it is capable of adequately instructing. If this number be much exceeded, then the efficiency of the Clinical system, and of necessity of the Medical School, must begin to decline.

Such, however, I apprehend, is not the popular idea, nor that generally entertained by the high authorities who control and regulate the Medical Colleges of India.

They, if I mistake not, would judge *that* School to be the most successful and the most efficient which showed the greatest number of students on its rolls. But if there be any truth in my firm belief that the efficiency of a Medical School is dependent on the efficiency of its Clinical system,

and if such system be of the nature I have elsewhere fully explained, then the opinion that numbers are the evidence of success and efficiency is a very serious error.

The true test of the efficiency of a Medical School is the just relation being observed between the number of the students and the Clinical means, and the rightful use of these means. So soon as this relation is deranged on the side of excess of numbers, the School must necessarily begin to decline.

And now, in conclusion, I would endeavour to apply these principles to this College.

The number of regular students has never been equal to its Clinical means—they have never exceeded thirty : my belief is that the Clinical means of this School are sufficient for a roll of fifty students. This number would give ten admissions and ten Graduates annually, and thirty students in attendance in the Clinical wards.

If these numbers at any time become much increased, and the Clinical means remain as at present, I venture with much confidence to express a very firm conviction, that from that time the efficiency and usefulness of the School will begin very sensibly to decline, and that the object of its institution, viz. the giving to the people of this Presidency a class of truly, not merely *nominally* qualified Medical practitioners, will soon cease to be realized.

My observations are now ended. Many of them may seem out of place in an official Report; yet it is impossible for those who are connected with Medical education in India not to feel that they are entrusted with the conduct of a subject, with the principles and details of which the controlling Government must necessarily be imperfectly acquainted, and that therefore they are not true to their

trust if they hesitate in frankly avowing those opinions to which they have arrived after some experience, and careful consideration and reflection.

Sentiments such as these are the only apology I have to offer for the length to which my remarks have extended, and for the freedom with which they have been stated.

23. The usual Appendices, embodying all important details relative to the proceedings of the Session, are annexed to the Report.

Appendix.

C. MOREHEAD, M.D.,

Principal, Grant Medical College.

Bombay, April 1854.

APPENDICES

TO THE

ANNUAL REPORT OF THE GRANT MEDICAL COLLEGE.

EIGHTH YEAR.—SESSION 1853-54.

APPENDIX A.

List of Candidates for Admission as Students into the Grant Medical College, with the Result of the Examination held on the 30th April 1853.

No.	NAMES.	Caste.	School where Educated.	Qualified or not.	Remarks.
1	Jumnadas Hurgovindas ...	Bania.	Elphinstone Institution	Qualified.	
2	Luxoomon Moreshwar, Shastri.....	Bramin.....	Poona College.....		
3	Vishnoo Purushram Shastri, Pundit	Do.	Ditto		
4	Bhikajee Amroot.....	Do.	Ditto		
5	Wamun Wasoodave Bhiday	Do.	Ditto		
6	Rustomjee Cowasjee	Parsee	Educated by Mr. Green....		
7	Sorabjee Jahangeerjee....	Do.	Elphinstone Institution		
8	A. P. D. Andrade	Portuguese	Free Church Institution....		
9	Dahayabhai Tribuvandass.	Bania	Elphinstone Institution	Not Qualified.	
10	Baljee Crustnath	Purbhoo	Ditto ditto		
11	Pestonjee Muncherjee.....	Parsee	Parsee Benevolent Institution		
12	Pestonjee Shapoorjee	Do.	Elphinstone Institution		

C. MOREHEAD,
Principal, Grant Medical College.

APPENDIX B.

List of Students in Attendance in the Grant Medical College during the Session 1853-54.

No.	NAMES.	Caste.	Age on Admission	Native Town.	In what School Educated.	Date of Admission.	Remarks.
	Free.						
1	Shamrao Narayen	Purbhoo	16	Bombay.	Elphinstone Institution..	15th June 1847.	Now a Graduate.
2	Palonjee Pestonjee	Parsee	17	Ditto ..	Ditto ..	15th June 1848.	Rejected.
3	Balkristna Sukharam	Pulsya	16	Ditto ..	Ditto ..	Ditto.	Now a Graduate.
4	Moreshwar Junardun	Ditto	16	Ditto ..	Ditto ..	15th June 1849.	Do. do.
5	Henry Horne	Portuguese ..	16	Ditto ..	Mr. Boswell's School....	15th June 1850.	
6	Bartholomew Vas	Ditto	17	Ditto ..	Free Church Institution .	15th June 1851.	Withdrawn.
	Stipendiary.						
7	Ruttonjee Hormosjee	Parsee	18	Surat ..	Surat G. E. School	15th June 1849.	Now a Graduate.
8	Balla Gopall.....	Bramin Convert ..	18	Poona ..	Free Church Institution .	Ditto.	Dead.
9	M. A. Misquitta	Portuguese ..	19	Bombay.	Elphinstone Institution..	Ditto.	
10	Hormusjee Bazunjee	Parsee	18	Ditto ..	Ditto ..	15th June 1850.	
11	Rustomjee Merwanjee.....	Ditto	19	Ditto ..	Ditto ..	Ditto.	

No.	Names.	Caste.	Age on Admission.	Native Town.	In what School Educated.	Date of Admission.	Remarks.
12	Deerujram Dulputram	Kayust	19	Surat ..	Surat G. E. School	15th June 1851.	
13	Angelino De Souza	Portuguese ..	19	Bombay.	Elphinstone Institution..	Ditto.	
14	Antonio M. C. Continho....	Ditto ..	19	Goa	Free Church Institution .	Ditto.	
15	Cooverjee Dorabjee.....	Parsee	18	Bombay.	Elphinstone Institution..	Ditto.	
16	Burjorjee Ardaseer	Ditto	16	Ditto ..	Ditto ..	Ditto.	
17	Bazunjee Rustomjee	Ditto	18	Ditto ..	Ditto ..	15th June 1852.	
18	Cursetjee Framjee	Ditto	16	Ditto ..	Ditto ..	Ditto.	
19	Cowasjee Nowrojee.....	Ditto	19	Ditto ..	Parsee B. Institution....	Ditto.	
20	Jumnadas Hurgovindas	Bania.....	18	Surat ..	Elphinstone Institution..	15th June 1853.	
21	Luxoomon Moreshwar, Shastri	Bramin	21	Waie ..	Poona College	Ditto.	Resigned.
22	Vishnoo Purushram Shastri, Pundit	Ditto	21	Sattara .	Ditto	Ditto.	Ditto.
23	Bhikajee Amroot.....	Ditto	18	Ankloas .	Ditto	Ditto.	
24	Wamon Wasoodave Bhiday .	Ditto	18	Poona ..	Ditto	Ditto.	
25	Rustomjee Cowasjee	Parsee	21	Surat ..	Educated by Mr. Green .	Ditto.	
26	Sorabjee Jahangeerjee.....	Ditto	17	Ditto ..	Elphinstone Institution..	Ditto.	
27	A. P. D. Andrade	Portuguese ..	20	Goa	Free Church Institution .	Ditto.	

C. Morehead,
Principal, Grant Medical College.

APPENDIX C.

GRANT MEDICAL COLLEGE.

SESSION 1853-54.

SUMMER TERM.

From 15th June to 1st November.

LECTURES.

On Wednesday the 15th June, the Introductory Lecture will be delivered by Dr. C. Morehead, at 12 o'clock.

ANATOMY. *Dr. G. Ballingall*	Monday, Wednesday, Saturday	at 1 P. M.
CHEMISTRY. *Dr. H. Giraud*	Tuesday, Thursday	at 12 o'clock.
PHYSIOLOGY. *Dr. C. Morehead*	Tuesday	at 2 P. M.
MATERIA MEDICA AND BOTANY. *Dr. H. Giraud*	Monday, Wednesday	at 12 o'clock.
PRINCIPLES AND PRACTICE OF MEDICINE. *Dr. C. Morehead*	Monday, Wednesday, Friday	at 2 P. M.
SURGERY. *Dr. G. Ballingall*	Tuesday, Friday	at 1 P. M.
MIDWIFERY. *Dr. W. C. Coles*	Tuesday, Thursday	at 3 P. M.
MEDICAL JURISPRUDENCE. *Dr. W. C. Coles*	Monday, Wednesday	at 3 P. M.
CLINICAL SURGERY. *Dr. G. Ballingall*	Tuesday	at 11 A. M.
CLINICAL MEDICINE. *Dr. C. Morehead*	Thursday	at 11 A. M.

PRACTICAL CHEMISTRY.

Dr. H. Giraud ..... Friday..... from 11 to 1 o'clock.

OPERATIVE SURGERY.

Dr. G. Ballingall ..... Thursday..... at 12 o'clock.

HOSPITAL ATTENDANCE.

Clinical Medical Ward	Daily,	at 7 A. M.
Clinical Surgical Ward	do.	at 8 A. M.
Clinical Midwifery Ward	do.	at 4 P. M.
Dispensary Practice	do.	at 8 A. M.

The 1st and 2nd Year Students will attend the Hospital daily, at 7 A. M., in rotation, for periods of two months, and will be engaged in compounding and dispensing Medicines.

EXAMINATIONS.

ANATOMY	Thursday, at 1 P. M.
CHEMISTRY	Saturday, at 11 A. M.
MATERIA MEDICA	Saturday, at 3 P. M.
PHYSIOLOGY.....	Thursday, at 2 P. M.
SURGERY	Saturday, at 12 o'clock.
MEDICINE	Saturday, at 2 P. M.
MEDICAL JURISPRUDENCE...	Friday, at 3 P. M.
MIDWIFERY	Saturday, at 3 P. M.

In addition to the regular Examinations by the Professors, in *Anatomy* and *Physiology*, *Chemistry*, and *Materia Medica*, Examinations will be held in *Chemistry* at 11 A. M., on Mondays, Wednesdays, and Fridays; in *Materia Medica* at 11 A. M., on Tuesdays and Thursdays; in *Anatomy* at 3 P. M., on Tuesdays, Thursdays, and Saturdays; and in *Physiology* at 3 P. M., on Mondays and Wednesdays.

During the hours when not engaged in the Lecture-room, the Students will be occupied in reading and note-taking in the Reading-room.

WINTER TERM.

From 1st November to 15th March.

The Lectures and Examinations will be on the same days and hours as during the *Summer Term.*

PRACTICAL ANATOMY.

The Dissecting Season will be from the 1st November to the

15th of March, and the Professor of Anatomy will, at its commencement, lay down rules relative to the hours of attendance of the different Classes of Students.

ROLL-CALLS.

The College hours are from 10 A. M. to 4 P. M. A Roll-call will take place before the commencement of each Lecture and Examination, as well as in the Clinical Wards.

From the 15th March to the 15th April the Examinations will be held for Diplomas, Honors, and the classification of the Students.

Order of the Lectures and Examinations during the day.

	11 to 12 A. M.	12 to 1 P. M.	1 to 2 P. M.	2 to 3 P. M.	3 to 4 P. M.
MONDAY.	*Examination Chemistry.*	Materia Medica.	Anatomy.	Medicine.	Medical Jurisprudence. *Examination Physiology.*
TUESDAY.	Clinical Surgery. *Examination Materia Medica.*	Chemistry.	Surgery.	Physiology.	Midwifery. *Examination Anatomy.*
WEDNESDAY	*Examination Chemistry.*	Materia Medica.	Anatomy.	Medicine.	Medical Jurisprudence. *Examination Physiology.*
THURSDAY.	Clinical Medicine. *Examination Materia Medica*	Chemistry. Operative Surgery.	Examination Anatomy.	Examination Physiology.	Midwifery. *Examination Anatomy.*
FRIDAY.	Practical Chemistry. *Examination Chemistry.*	Practical Chemistry.	Surgery.	Medicine.	Examination Medical Jurisprudence.
SATURDAY.	Examination Chemistry.	Examination Surgery.	Anatomy.	Examination Medicine.	Examination Midwifery. Examination Materia Medica. *Examination Anatomy.*

C. MOREHEAD,

10*th June* 1853. Principal, Grant Medical College.

APPENDIX D.

Abstract of Roll-calls of Students for the Session 1853-54.

Names.	Absent.	Leave.	Sick.	Total.	No. of Roll Calls.
Shamrao Narayen	...	11	74	85	
Palonjee Pestonjee	13	39	56	108	
Balkristna Succaram	8	35	22	65	
Ruttonjee Hormusjee	...	10	...	10	
Moreshwar Junardun	1	55	53	109	978
M. A. Misquitta	...	4	...	4	
Rustomjee Merwanjee	1	3	139	143	
Hormusjee Bazunjee	11	14	41	66	
Henry Horne	19	6	146	171	
A. M. Continho	...	2	12	14	
Cooverjee Dorabjee	35	36	247	318	
Burjorjee Ardaseer	1	13	6	20	1136
A. de Souza	25	6	146	177	
Dheerajram Dulputram	...	7	1	8	
Bazunjee Rustomjee	...	5	74	79	
Cowasjee Nowrojee	1	13	35	49	765
Cursetjee Framjee	2	4	4	10	
Jumnadas Hurgovundas	9	6	26	41	
Bhikajee Amroot	14	21	19	54	
Wamon Wasoodave	9	11	31	51	658
Rustomjee Cowasjee	...	3	...	3	
Sorabjee Jahangeerjee	2	4	49	55	
A. P. D. Andrade	...	4	...	4	

C. MOREHEAD,
Principal, Grant Medical College.

APPENDIX E.

Return of Student Apprentices who have attended the College during the Session 1853-54.

No.	Names.	Age at Admission.	Date of joining the College.	Remarks.
1	James Sinclair	18	7th August 1850	Received Certificate of Qualification.
2	Vincent de Souza	21	June 1851	Ditto ditto.
3	Edward Heffernan	18	„ „	Ditto ditto.
4	Patrick Drumm	18	„ „	Ditto ditto.
5	C. F. Lewis	22	„ „	
6	Daniel Oneil	22	15th June 1852	
7	Charles Stephens	20	„ „	
8	Henry Washington	19	„ „	
9	Francis Pinto	20	„ „	
10	Amerine Vere	20	„ „	Discharged from the Service.
11	John Johnstone	18	8th July 1852	Dead.
12	Sylvester Cavanagh	18	1st Sept. 1852	
13	Pandoo Chowan	22	15th June 1853	
14	Patrick Grogan	17	„ „	Discharged from the Service.
15	Dhunjeebhoy Cowasjee	20	„ „	

No.	Names.	Age at Admission.	Date of joining the College.	Remarks.
16	William Wilson	16	15th June 1853	
17	William Duggan	17	,, ,,	
18	J. M. O'Brian	16	,, ,,	
19	Joaquin Silvester	18	,, ,,	
20	A. Burn	20	,, ,,	Discharged from the Service.
21	James Kinlock	19	,, ,,	
22	Joseph Neil	19	,, ,,	
23	Edward McGeoch	17	,, ,,	
24	R. L. McLean	19	,, ,,	
25	Andrew Collins	17	,, ,,	
26	J. H. Bedford	16	,, ,,	
27	George Lloyd	19	,, ,,	
28	Ellapah Lingoo	17	28th June 1853	

C. Morehead,
Principal, Grant Medical College.

APPENDIX F.

Abstract of Roll-calls of Student Apprentices for the Session 1853-54.

Names.	Absent.	Leave.	Sick.	Total.	No. of Roll-calls.
J. Sinclair	18	11	32	61	
P. Drumm	..	3	134	137	
V. de Souza	..	...	..	..	978
E. Heffernan	..	7	150	157	
C. F. Lewis	..	27	4	31	
H. Washington	1	1	8	10	
S. Cavanagh	1	..	159	160	
F. Pinto	..	..	246	246	1116
C. Stephens	33	3	330	366	
D. Oneil	21	..	362	383	
Pandoo Chowan	..	..	..	.	
Dhunjeebhoy Cowasjee	..	12	..	12	
W. Wilson	21	..	35	56	
W. Duggan	31	38	38	107	
J. M. O'Brian	45	13	89	147	
J. Silvester	1	..	..	1	
J. Kinlock	...	..	2	2	
J. Neil	20	6	116	142	583
E. McGeoch	10	11	3	24	
R. L. McLean	11	11	91	113	
A. Collins	17	3	4	24	
J. H. Bedford	6	7	27	40	
G. Lloyd	74	25	120	219	
Ellapah Lingoo	2	1	6	9	

C. Morehead,
Principal, Grant Medical College.

APPENDIX G.

Return of Warrant Medical Officers and Hospital Assistants who have attended the College during the Session 1853-54.

No.	Names.	Rank.	Date of joining the College.
1	Richard Hudson	Assist. Apothecary.	16th June 1851.
2	Edward Brooks	Ditto.	Ditto.
3	Charles Thompson ..	Ditto.	Ditto.
4	C. R. McMorris	Ditto.	August 1853.
5	William Douglas....	Ditto.	2nd July 1853.
6	Francis St. Francis..	1st Hospital Assist.	16th June 1851.
7	Vincent Amor.....	Ditto.	15th June 1853.
8	J. D. Rozario	2nd Hospital Assist.	15th June 1852.
9	D. J. R. Cunha	Ditto.	Ditto.
10	F. Lobe	Ditto.	15th June 1853.

C. Morehead,
Principal, Grant Medical College.

APPENDIX H.

NUMBERS IN ATTENDANCE IN THE COLLEGE.

Students.

Remained at the close of last Session	19
Admitted at commencement of this Session	8
Total....	27

Student Apprentices.

Remained at the close of last Session...	12
Admitted at commencement of this Session	16
Total....	28

Warrant Officers and Hospital Assistants.

Number attending during the Session	10
Grand Total....	65

C. Morehead,
Principal, Grant Medical College.

APPENDIX I.

Statement of the Numbers attending the several Courses of Lectures.

Anatomy.

Students	16
Warrant Officers and Hospital Assistants	6
Student Apprentices	22
Total.....	44

Chemistry.

Students	11
Warrant Officers and Hospital Assistants	9
Student Apprentices	16
Total.....	36

Materia Medica.

Students	8
Warrant Officers and Hospital Assistants	6
Student Apprentices	16
Total.....	30

Physiology.

Students	8
Warrant Officers and Hospital Assistants	6
Student Apprentices	6
Total.....	20

Principles and Practice of Medicine.

Students	15
Warrant Officers and Hospital Assistants	6
Student Apprentices	11
Total.....	32

Surgery.

Students	15
Warrant Officers and Hospital Assistants	6
Student Apprentices	11
Total.....	32

Midwifery.

Students	10
Warrant Officers and Hospital Assistants	4
Student Apprentices	5
Total.....	19

Medical Jurisprudence.

Students	10
Warrant Officers and Hospital Assistants	4
Student Apprentices	5
Total.....	19

C. Morehead,
Principal, Grant Medical College.

APPENDIX J.

Return of the Sick treated in the Clinical Medical Ward of the Jamsetjee Jejeebhoy Hospital, in the Session 1853-54, *from* 15*th June* 1853 *to* 15*th March* 1854.

Names of Diseases.			Nomber Admitted.	Number Discharged.	Died.	Total.	Remarks.
Fevers.	Intermittent	Quotidian	16	16	..		
		,, C. Enlarged Spleen	6	6	..		
		,, ,, Bronchitis	3	3	..		
		,, ,, ,, and Enlarged Spleen.	2	2	..		
		,, ,, Phthisis	1	..	1		
		,, Hepatitis, & Enlarged Spleen.	1	1	..		
		Tertian	2	2	..		
		,, formerly Facial Palsy	1	1	..		
		Quartan	1	1	..		
						33	
	Remittent	Simple	4	4	..		
		,, C. Pneumonia	12	8	4		
		,, ,, ,, and Pleuritis	2	2	..		
		,, Enlarged Spleen and Pneumonia.	2	2	..		
		,, Dysentery	1	1	..		
		,, Gastric Symptoms	1	1	..		
						22	

Abdominal Diseases	Partial Peritonitis	1	1	..	
	Hepatitis	5	5	..	
	Hepatic Abscess	8	3	5	
	,, C. Pneumonia	1	..	1	
	Jaundice	2	2	..	
	Diarrhœa	1	1	..	
	Dysentery	9	9	..	
	,, C. Facial Palsy	1	1	..	
	Diabetes	3	3	..	
	Bright's Disease	9	6	3	
	Splenic Cachexia	1	1	..	
					41
Thoracic Diseases	Pleurodynia	1	1	..	
	Pneumonia	6	5	1	
	Bronchitis	1	1	..	
	Pleuritis	8	7	1	
	,, C. Bronchitis	2	1	1	
	,, ,, Phthisis	1	1	..	
	Phthisis	22	15	7	
	Asthma and Emphysema	3	2	1	
	Diseases of Heart and Valves (Aortic and Mitral)	7	6	1	
					51
Diseases of the Nervous System	Epilepsy	1	1	..	
	Cerebritis	1	1	..	
	Hemiplegia	7	7	..	
	Facial Palsy	1	1	..	
	,, C. Incomplete Hemiplegia.	1	1	..	
	Tetanus (Idiopathic)	1	1	..	
	,, (Traumatic)	2	1	1	
					14
Skin Diseases	Herpes Zoster	1	1	..	
					1

Names of Diseases.		Number Admitted.	Number Discharged.	Died.	Total.	Remarks.
Other Diseases	General Anmia	2	1	1		
	General Dropsy	3	3	..		
	Ascites	4	3	1		
	Rheumatism	3	3	..		
	Syphilis (Secondary)	1	1	..	13	
	Total	175	146	29	175	

C. Morehead,
Professor of Medicine, Grant Medical College.

Note of the Principal Classes of Diseases treated in the Jamsetjee Jejeebhoy Hospital, from 1st April 1853 to 31st March 1854.

Admissions, 4,514. Deaths, 696.

Classes of Diseases.	Admissions.	Deaths.
Fevers	705	37
Eruptive fevers, chiefly small-pox	28	10
Diseases of the liver	74	20
Diseases of the stomach and bowels	615	214
Cholera	169	103
Diseases of the brain	109	16
Dropsies	47	22
Rheumatic affections	307	...
Venereal affections, and diseases of the genital organs	531	30
Abscesses and ulcers	296	5
Wounds and injuries	456	15
Diseases of the lungs	305	85
Diseases of the eye	48	...
Diseases of the skin	220	21
Other diseases, including poisoning by arsenic, datura, opium, and cases of parturition	604	118
Total.....	4,514	696

C. Morehead,
Principal, Grant Medical College.

Note of the Principal Classes of Diseases treated at the Jamsetjee Jejeebhoy Hospital Dispensary, from 1st April 1853 to the 31st March 1854, arranged according to Sex.

Diseases.	Males.	Females.	Children	Total.
Fevers	1,027	436	510	1,973
Affections of the stomach and bowels	786	346	429	1,561
Affections of the air passages	533	189	328	1,050
Rheumatic affections	790	195	1	986
Venereal affections	1,416	83	...	1,499
Skin diseases	1,358	282	351	1,991
Uterine diseases	...	160	...	160

Total Number treated at the Dispensary, arranged according to Castes and Sex.

Castes.	Males.	Females and Children
Christians	898	263
Mussulmans	3,355	759
Hindoos	4,032	718
Parsees	1,018	749
Children of both sexes under 7 years of age	...	2,320
Total	9,396	4,839
Grand Total	14,235	

C. Morehead,
Principal, Grant Medical College.

APPENDIX K.

Table of Diseases and Injuries treated in the Clinical Surgical Ward, during the Session 1853-54.

Names of Diseases.			Admitted.	Discharged.	Died.	Remarks.
Abscess		Acute	2	2	..	
		Chronic	1	..	1*a*	*a* Died from dysentery.
Contusions			2	2	..	
Diseases of the Bones.		Caries	5	25	1	*b* In one case, amputation of arm performed.
		Exostosis	1	1	..	
		Necrosis	2	2	..	
Diseases of Urinary Organs		Calculus Vesicæ	1	1	..	
		,, of the Prostate.	1	..	1	
		Cystitis, Chronic	1	1	..	
		Urinary Abscess	1	1	..	
Dislocations, (Compound,) Ankle			2	1	1*c*	*c* Amputation of leg performed.
Erysipelas			2	1	1	
Extravasation of Urine			1	1	..	
Fistula in Perineo			1	1	..	
Fistulous opening into Larynx			1	1	..	
Fractures	Simple	Femur	5	5	..	
		Clavicle	2	2	..	
		Ribs	2	2	..	
		Skull	1	1	..	
		Forearm	4	4	..	

Names of Diseases.			Admitted.	Discharged.	Died.	Remarks.
Fractures *(continued)*.	Simple	Arm	2	2	..	
		Jaw	1	1	..	
	Compound	Phalanges of Hand	1	1	..	
		Arm	1	..	1*d*	*d* Amputation at shoulder joint performed.
		Forearm	1	1	..	
		Leg	1	1	..	
Gangrene Senile			1	..	1	
Hœmorrhoids			1	1	..	
Hypertrophy of Scrotum			1	1	..	
Hernia, Strangulated Inguinal			4	2	2	
Onychia			1	1	..	
Prolapsus Ani			1	1	..	
Syphilis, Secondary			1	1	..	
Sprain			1	1	..	
Synoritis			2	2	..	
Tetanus, Traumatic			4	1	3	
Tumores			2	2	..	
Ulcers			5*e*	4	1	*e* In one case result unknown.
Warts			1	1	..	
Wounds	Contused and Lacerated.		24	23	1*f*	*f* Amputation of leg performed, gangrene.
	Incised		3	3	..	
		Total....	95	81	14	

G. R. Ballingall,
Acting Professor of Surgery.

Table of Capital and Minor Operations performed in the presence of the Students during the Session 1853-54.

Amputation of thigh	1
Ditto of arm	1
Ditto of toe	5
Ditto of fingers	7
Ditto of shoulder joint	1
Ditto of leg	2
Trephining	1
Trachrotomy	1
Ligature of polypus of pharynx	1
Removal of foreign bodies from the ear	5
Ditto of polypus from the nose	2
Restoration of nose	1
Operation of strangulated hernia	2
Slitting fistula in ano	3
Ligature of posterior tibial artery	1
Reducing dislocations	3
Removing foreign bodies from the nose	6
Ditto of stone from the urethra	4
Tapping hydrocele	116
Opening sinuses	2
Slitting prepuce	6
Opening abscess	248
Opening paronychia	23
Removal of sequestrum	5
Removing nail of great toe	4
Ligature of hœmorrhoids	5
Removal of encysted tumours	2
Ditto of tumours	16
Ditto of warts	1
Ditto of foreign bodies from foot	1
Reducing paraphymoses	9
Incisions	4
Dividing cicatrix	2
Extracting teeth	147
Bleeding	18
Cupping	3
Introducing catheters	76
Ditto sounds	4
	739

G. R. Ballingall,
Acting Professor of Surgery.

APPENDIX L.

Obstetric Institution.

Returns of Patients under treatment in the Obstetric Wards since August 1852.

Session 1852-53.

Diseases of Pregnancy.	Parturition.		Castes.		Result to Mothers.		Result to Children.		Sex of Children.	
None.	Natural labours.....	8	Christians. ..	8	Recovered	9	Born alive	8	Males.	4
	Preternatural do. ...	1	Hindoos.	1	Died	..	Born dead	1	Females.	5
	Total..	9	Total..	9	Total..	9	Total..	9	Total..	9

Session 1853-54.

Diseases of Pregnancy.		Parturition.		Castes.		Result to Mothers.		Result to Children.		Sex of Children.	
Abortions	4	Natural labours	8	Christians ...	6	Recovered	21	Born alive	8	Males	7
Retroversion of uterus..	1	Difficult ditto (tedi-		Parsees.	4	Died (case of abor-		Born dead	6	Females	7
Other diseases.....	3	ous instrumental).	2	Hindoos.. ..	8	tion with dysen-		Born putrid	4	Unknown. ..	4
		Preternatural ditto.		Mussulmans..	4	tery)	1				
		(arm cases & turn-									
		ing)	4								
Total..	8	Total..	14	Total..	22	Total..	22	Total..	18	Total..	18

W. C. Coles, M. D.,
Acting Professor of Midwifery.

Bombay, 16th April 1854.

APPENDIX M.

Result of First Certificate Examination. Session 1853-54.

No. of Years' Study.	NAMES.	Anatomy.	Physiology.	Materia Medica.	Chemistry.	Practical Chemistry.	Practical Anatomy.	REMARKS.
4	Hormasjee Bazunjee ..	Not Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Not Qualified
4	Henry Horne	Qualified	Do.	Not Qualified	Do.	Do.	Do.	Do.
3	A. M. Continho	Do.	Do.	Qualified	Do.	Do.	Do.	Qualified
3	Cooverjee Dorabjee ..	Do.	Do.	Do.	Do.	Do.	Do.	Do.
3	Burjorjee Ardaseer....	Do.	Do.	Do.	Do.	Do.	Do.	Do.
3	A. De Souza	Not Qualified	Do.	Do.	Do.	Do.	Not Qualified	Not Qualified
3	Dheerajram Dulputram.	Qualified	Do.	Do.	Do.	Do.	Qualified	Qualified

C. MOREHEAD,
Principal, Grant Medical College.

APPENDIX N.

GRANT MEDICAL COLLEGE.

The Annual Examinations at the Grant Medical College will commence on Friday the 10th March, and be conducted in the following manner :—

I.—Examination of Candidates for "First Examination" Certificates.

Friday, 10th March.—Practical Anatomy.
Saturday, 11th.—Written examination in Anatomy and Physiology.
Monday, 13th.—Written examination in Chemistry.
Tuesday, 14th.—Oral examination in Anatomy.
Thursday, 16th.—Written examination in Materia Medica.
Friday, 17th.—Oral examination in Chemistry.
Saturday, 18th.—Oral examination in Materia Medica and Botany.
Monday, 20th.—Practical Chemistry and Pharmacy.
Tuesday, 21st.—Oral examination in Physiology.

II.—Examination of Candidates for the Diploma of Graduate, conducted by the Government Examiner and Assessors.

Wednesday, 22nd March.—Operative Surgery.
Saturday, 25th.—Written examination in Medicine.
Tuesday, 28th.—Oral examination in Medicine.
Wednesday, 29th.—Written examination in Surgery.
Friday, 31st.—Oral examination in Surgery.
Saturday, 1st April.—Written examination in Midwifery.

Tuesday, 4*th*.—Oral examination in Midwifery.

Wednesday, 5*th*.—Written examination in Medical Jurisprudence.

Friday, 7*th*.—Oral and practical examination in Medical Jurisprudence.

Examinations in the Jamsetjee Jejeebhoy Hospital, in Clinical Medicine, and in Clinical Surgery, were commenced in February.

III.—Examination of College Students.

1st and 2nd Year Students.

Friday, 10*th March*.—Practical Anatomy.

Saturday, 11*th*.—Written examination in Anatomy and Physiology.

Monday, 13*th*.—Written examination in Chemistry.

Thursday, 16*th*.—Written examination in Materia Medica.

Monday, 20*th*.—Practical Chemistry and Pharmacy.

Saturday, 25*th*.—Oral examination in Anatomy.

Monday, 27*th*.—Oral examination in Chemistry.

Wednesday, 29*th*.—Oral examination in Materia Medica.

Thursday, 30*th*.—Oral examination in Physiology.

3rd and 4th Year Students.

Saturday, 25*th*.—Written examination in Medicine and Surgery.

Tuesday, 28*th*.—Written examination in Medical Jurisprudence.

Wednesday, 29*th*.—Written examination in Midwifery.

Saturday, 1*st April*.—Oral examination in Medicine and Surgery.

Wednesday, 5*th*.—Oral examination in Midwifery and Medical Jurisprudence.

The 3rd Year Students who do not present themselves for examination for "First Examination" Certificates will be examined in Anatomy, Physiology, and Materia Medica with the 2nd Year Students.

IV.—Examination of Student-Apprentices.

1st and 2nd Year Student-Apprentices.

Tuesday, 14*th March*.—Anatomy and Physiology.

Thursday, 16*th*.—Chemistry and Materia Medica.
Saturday, 1*st April*.—Medicine and Surgery.

3rd Year Student-Apprentices.

Friday, 10*th March*.—Practical Anatomy.
Thursday, 16*th*.—Written examination in Materia Medica.
Monday, 20*th*.—Practical Chemistry and Pharmacy.
Wednesday, 22*nd*.—Operative Surgery.
Saturday, 25*th*.—Oral examination in Anatomy.
Monday, 27*th*.—Oral examination in Chemistry.
Wednesday, 29*th*.—Oral examination in Materia Medica.
Thursday, 30*th*.—Oral examination in Physiology.
Saturday, 1*st April*.—Oral examination in Medicine and Surgery.
Monday, 3*rd*.—Written examination in Medicine and Surgery.
Wednesday, 5*th*.—Oral examination in Midwifery and Medical Jurisprudence.

V.—Examination of Warrant Medical Officers.

Saturday, 25*th March*.—Anatomy and Physiology.
Monday, 27*th*.—Chemistry.
Wednesday, 29*th*.—Materia Medica.
Saturday, 1*st April*.—Medicine and Surgery.
Wednesday, 5*th*.—Midwifery and Medical Jurisprudence.

Hospital Stewards, Assistant Apothecaries, and Native Hospital Assistants, desirous of undergoing the Examination contemplated in the 35th Article of the Government Order dated 2nd April 1851, are requested to give in their names to the Principal before the 20th of March.

From these Examinations will be awarded the *Carnac*, *Farish*, *Anderson*, and *Reid* Scholarships, and the *Sir Jamsetjee Jejeebhoy* Annual Prize to the Students of the College; the *Burnes'* Medal to the best 3rd Year Student-Apprentice; and Prizes of Books by the Physician General, and the Warrant Medical Officers at the Presidency, to the best Junior Student-Apprentices.

The *Willoughby* Medical Prize of Rs. 300 will be awarded in the first week of April. Candidates are referred to the Government Notification dated October 25th 1853.

The Examinations on each day will commence at 11 o'clock A. M., and the attendance of Medical Gentlemen, and others interested in Medical Education, will be acceptable.

JOHN MCLENNAN, M.D.,
Government Examiner.

C. MOREHEAD, M.D.,
Principal, Grant Medical College.

Bombay, March 1st 1854.

APPENDIX O.

FIRST EXAMINATION CERTIFICATES.

Anatomy.

1. Describe the axillary space, as regards situation, extent, shape, and boundaries. Name the parts seen, after the skin and fascia have been removed, on raising the arm, and looking into the space from below.

2. Name the bones which enter into the formation of the wrist-joint. Describe the arrangement of the articular surfaces, and enumerate the ligaments. State the nature of the movements which are permitted by this articulation.

3. Mention the names of the muscles by which the femur is rotated outwards, and describe the origin, insertion, and relations of those external rotators, which arise within the pelvis. Mention, also, the sources from which these muscles receive their vascular and nervous supplies.

John Peet,
Professor of Anatomy.

11*th March* 1854.

Chemistry.

1. Illustrate the law of equivalent combination by an example, and explain it by the atomic hypothesis.

2. Describe the peculiar physical properties of mercury. State its general chemical relations as compared with other metals. Mention the composition of its oxides, and the manner in which they may be formed.

3. Upon what principles does the electro-magnetic machine,

which is used for therapeutic purposes, depend for its action?

4. How would you detect the presence of albumen, of sugar, and of bile in the urine?

HERBERT GIRAUD, M.D.

13*th March* 1854.

MATERIA MEDICA.

1. Mention some of the best diffusible stimulants; the nature of the cases in which you would administer them; and give formulæ for their administration.

2. The names, the peculiar modes of action, and the uses of the narcotic solaneæ?

3. What are the best mineral and vegetable diuretics, and what are the peculiarities of their several actions? Give some formulæ for their administration.

4. How is quinæ disulphas obtained? What are its general chemical qualities? What adulterations is it liable to? and how may they be detected?

HERBERT GIRAUD, M.D.

16*th March* 1854.

PHYSIOLOGY.

1. Explain the function of the three divisions of the 8th pair of nerves.

2. Explain the function of the kidney, and its relation to the several parts of the structure of the organ. State the sources from which the urea of the urine proceeds, and the circumstances which lead to its greatest abundance.

C. MOREHEAD.

11*th March* 1854.

APPENDIX P.

REPORT OF THE FINAL EXAMINATION BY THE GOVERNMENT EXAMINER.

Bombay, 8th April 1854.

To C. J. ERSKINE, Esquire,
Secretary to Government, General Department.

SIR,

The Final or Diploma Examinations of the Students of the Grant Medical College having terminated yesterday, I have now the honour to submit in duplicate a report of the result, for the information of Government and the Board of Education.

2. In the conduct of this duty I have, as in former years, had the able assistance of Messrs. Stovell, Arbuckle, and Campbell as Assessors, and of the Principal and Professors of the College.

3. In Medicine and Surgery the Clinical examinations have been conducted in the Wards of the Jamsetjee Jejeebhoy Hospital three times a week, during the whole of February and first part of March.

4. On these important subjects, and particularly in Medicine, the Students gave convincing proofs of their admirable training, and of the extraordinary care and systematic fidelity and attention with which they had been instructed.

5. During the course of the Clinical Examinations in Surgery, the cases admitted into Hospital did not chance to have been of that very varied nature which gave scope for as extensive practical acquaintance with the merits of each Student in this branch as in Medicine, but still, during the tour of duty of each as Clinical Clerk or Dresser, I had an opportunity of seeing their practical acquaintance with several kinds of apparatus and

bandaging, dressing, and likewise of viewing their mode of performing the minor operations, such as the lesser amputations, tapping for hydrocele, incising carbuncles, &c. &c.

6. In Surgery in the theatre, each student performed a capital operation, and tied a principal artery, and all acquitted themselves perfectly.

7. The examinations in Medicine, Surgery, Midwifery, the Diseases of Women and Children, and Medical Jurisprudence, written and oral, were conducted on eight separate days; the questions for the written examinations on these subjects are appended, and the oral were conducted as in former years.

8. In Medical Jurisprudence, each student performed three or more analyses of mineral and vegetable matters, and generally their performances were satisfactory.

9. The result of these examinations has been the ascertainment, that of five Candidates who presented themselves, four are qualified for the Diploma, and one has been rejected.

10. The names of the successful Candidates are subjoined in the order of their merit :—

Ruttonjee Hormasjee.
Shamrao Narayen.
Moreshwar Junardhan.
Balkristna Succaram.

The paper marked A contains the results of the various examinations of the Candidates, &c.

11. In conclusion, I beg to submit for the favourable consideration of Government, my respectful recommendation, that to each of these students an appointment of Sub-Assistant Surgeon may be given.

I have the honour to be, Sir,
Your most obedient Servant,

(Signed) JOHN MCLENNAN,
Government Examiner.

A.

Result of Diploma Examination. Session 1853-54.

NAMES.	Clinical Medicine and Surgery.	Medicine.	Surgery.	Operative Surgery.	Midwifery.	Medical Jurisprudence.	REMARKS.
Shamrao Narayen	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	To obtain the Diploma.
Balkristna Succaram ..	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.	Ditto ditto.
Palonjee Pestonjee	Ditto.	Ditto.	Not qfd.	Ditto.	Not qfd.	Ditto.	Rejected.
Ruttonjee Hormusjee ..	Ditto.	Ditto.	Qualified.	Ditto.	Qualified.	Ditto.	To obtain the Diploma.
Moreshwar Junardhan..	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.	Ditto.	Ditto ditto.

(Signed) JOHN MCLENNAN, Government Examiner.

B.

25th March 1854.

ON MEDICINE.

1st.—"Coup-de-Soleil," "Stroke of the Sun." Describe the states to which these synonymous terms have been applied. Explain their differences and pathology, and detail the treatment to be pursued in the different varieties.

2nd.—Indicate derangements or departures from a normal state in the circulating system, and their seats and kinds, which on the one hand would lead to disease in the viscera of the chest, and on the other to disease in the viscera of the abdomen; mentioning the nature of the diseases produced, and the rationale of their production; and, as affects the contents of both cavities, those diseases produced through the arterial, and those through the venous systems.

3rd.—Enumerate the *post-mortem* appearances generally found in acute dysentery. Mention the general indications of treatment, and how they are to be adopted in different stages, forms, and complications of the disease.

4th.—Explain the principles of treatment of remittent fever, both at the periods of exacerbation and remission. In it when are thoracic complications most frequent and most dangerous, and what tissues or parts are generally affected?

5th.—Mention the different means employed to arrest hæmoptysis, and the circumstances in which they are respectively useful.

6th.—Explain the difference as elements of nutrition between what has been termed nitrogenous and non-nitrogenous food. Enumerate the principal alimentary substances comprised under each, and explain why a mixture of both classes is best adapted for the sustenance of the human body.

JOHN MCLENNAN,
Government Examiner.

C.

29th March 1854.

ON SURGERY.

1st.—State the primary and secondary consequences of a wound into a joint, if adhesion of the divided parts does not speedily take place. Describe the treatment of such wound, and its consequences. How do you explain the frequent absence of inflammatory symptoms after excision of a joint, and whence arises the difference of danger between excision of the bones in such a case, and of loose cartilages sometimes contained in a joint ?

2nd.—What difference as to frequency of occurrence is there between the different malignant tumours of the mamma and testis ? Describe carcinoma in the former, and state what are the diseases occurring in the breast which might be mistaken for it. Under what circumstances might extirpation be recommended ?

3rd.—Describe the dangers and difficulties of tracheotomy in the adult and the child.

4th.—Mention the most important symptoms in the second stage of acute purulent ophthalmia, the principal danger to be apprehended, the cause of this danger, the indications in the treatment for its prevention, and the best means for carrying out these indications.

5th.—Describe the course of symptoms, secondary and tertiary, following that form of sore to which the term syphilitic has been applied. Mention generally the required treatment.

6th.—What are the causes of hospital gangrene, and what the most appropriate treatment ? How is it disseminated, and what means are to be taken to check its progress in hospitals and camps ?

JOHN MCLENNAN,
Government Examiner.

D.

1st April 1854.

ON MIDWIFERY, AND DISEASES OF WOMEN AND CHILDREN.

1st.—What are the indications for, and what circumstances are necessary to be attended to, in the operation of turning? Is it ever found to be impracticable or unadvisable to persist in attempts to effect it; and if so, what then is to be done?

2nd.—Explain what has been termed "Hour-glass contraction of the Uterus." With what dangerous conditions is it commonly associated, and what is the treatment?

3rd.—Give the diagnosis between the different pelvic and abdominal inflammations which occur after child-birth. Diagnose the phlebitic consequences of that state. As a phlebitic disease, what is peculiar in phlegmasia dolens?

4th.—Give the diagnosis between croup and laryngismus stridulus. Mention the circumstances on which the prognosis in both diseases is founded, and distinguish the treatment.

5th.—What are the differences in effect, immediate and remote, between general blood-letting in the young child and in the adult?

6th.—Are any teeth contained in the jaw of the child at birth? In what order do the temporary and permanent teeth appear, and when? At what period of life are there most teeth in the jaws? Under what circumstances is the gum-lancet to be resorted to in dentition?

JOHN MCLENNAN,
Government Examiner.

E.

5th April 1854.

ON MEDICAL JURISPRUDENCE.

1st.—Describe what is meant by molecular and somatic death. Physiologically what are the different modes of dying? Detail the *post-mortem* appearances which would induce you to deliver

an opinion that death had occurred in one or other of these modes.

2nd.—Describe the different proximate causes of death arising from various vegetable poisons, and the indications of treatment arising from the knowledge of these causes.

3rd.—Detail the diseases which simulate, and may be mistaken for narcotic poisoning, with the differences between them.

4th.—In poisoning by alcohol, how is it supposed to act? What is the treatment? What diseases result from the habitual excessive use of spirituous liquors?

5th.—What are the signs of recent and remote delivery in the living and the dead? Beyond what period in the living are the signs of recent delivery likely to be ambiguous? In a case of contested legitimacy, is it possible, in respect to delivery at a remote period, to pronounce with certainty that it has or has not occurred?

6th.—Mention the most remarkable differences between insanity in India and in Europe, with reference to cause, age, and sex.

JOHN MCLENNAN,
Government Examiner.

APPENDIX Q.

GRANT MEDICAL COLLEGE.

NOTIFICATION.

The following Scholarships and Prizes will be open for competition at the close of the Session 1853-54, viz. in the month of April 1854:—

I.

To the 4th and 3rd Year Students.

A CARNAC Scholarship, of Rupees 25 monthly, to the best Anatomist, *Practical and Surgical Anatomy included.*

An ANDERSON Scholarship, of Rupees 25 monthly, for the greatest proficiency and zeal in the discharge of the duties of Clinical Clerk and Surgical Dresser.

II.

To the 4th Year Students.

An ANDERSON Scholarship, of Rupees 25 monthly, for the greatest proficiency in, and practical knowledge of, Medicine, Surgery, and Midwifery.

In awarding this Scholarship, much importance will be attached to assiduous and regular attendance in the Clinical Wards, and to efficiency and zeal in the discharge of the duties of Clinical Clerk and Dresser.

III.

To the 3rd and 2nd Year Students.

A REID Scholarship, of Rupees 20 monthly, for the greatest proficiency in Anatomy and Physiology.

A FARISH Scholarship, of Rupees 20 monthly, for the greatest proficiency in Materia Medica and Practical Pharmacy.

IV.

To the 2nd and 1st Year Students.

A CARNAC Scholarship, of Rupees 15 monthly, for the greatest proficiency in Chemistry, both Theoretical and Practical.

V.

To the 1st Year Students.

An ANDERSON Scholarship, of Rupees 15 monthly, for the greatest proficiency in the subjects of study during the Session.

A FARISH Scholarship, of Rupees 10 monthly, for the second degree of proficiency in the subjects of study.

A CARNAC Scholarship, of Rupees 10 monthly, for the greatest practical proficiency in Compounding Medicine.

SIR JAMSETJEE JEJEEBHOY'S Annual Medical Prize, of Rupees 250, to be awarded to that 4th or 5th Year Student, who, having passed his Final Examination, has, in the judgment of the Government Examiner, evinced in the Clinical Wards the greatest practical knowledge of Medicine, Surgery, and Midwifery, and has shown in the Laboratory the greatest practical acquaintance with the Toxicological branch of Medical Jurisprudence.

(Signed) C. MOREHEAD, M.D.,
Principal, Grant Medical College.

Bombay, 20th October 1853.

By order of the Board of Education,
M. STOVELL,
Secretary.

APPENDIX R.

Scholarships and Prizes awarded to the Students of the Grant Medical College at the close of the Session 1853-54.

1. A CARNAC Scholarship, of Rupees 25 monthly, to the best Anatomist, Practical and Surgical Anatomy included, open for competition to the 4th and 3rd year students, to *Mr. A. M. Continho*, a 3rd year student.

2. An ANDERSON Scholarship, of Rupees 25 monthly, for the greatest proficiency and zeal in the discharge of the duties of Clinical Clerk and Dresser, to *Mr. M. A. Misquitta*, 4th year student.

3. An ANDERSON Scholarship, of Rupees 25 monthly, for the greatest proficiency in, and practical knowledge of Medicine, Surgery, and Midwifery, open to 4th year students, to *Rustomjee Merwanjee*.

4. A REID Scholarship, of Rupees 20 monthly, open to 3rd and 2nd year students, for the greatest proficiency in Anatomy and Physiology, to *Mr. Continho*; but as *Mr. Continho* is the successful competitor for the Carnac Scholarship, the pecuniary advantage of this Scholarship will pass to the next in proficiency, *Burjorjee Ardaseer*.

5. A FARISH Scholarship, of Rupees 20 monthly, open to 3rd and 2nd year students, for the greatest proficiency in Materia Medica and Practical Pharmacy, to *Mr. Continho*; but as Mr. Continho is the successful competitor for two other Scholarships, the pecuniary advantage will pass to the next in proficiency, *Cowasjee Nowrojee*.

6. A CARNAC Scholarship, of Rupees 15 monthly, open to

2nd and 1st year students, for the greatest proficiency in Chemistry, both Theoretical and Practical, to *Cursetjee Framjee*, 2nd year student.

7. An ANDERSON Scholarship, of Rupees 15 monthly, open to 1st year students, for the greatest proficiency in the subjects of study during the Session, to *Jumnadas Hurgovindas*.

8. A FARISH Scholarship, of Rupees 10 monthly, for the second degree of proficiency in the subjects of study, to *Mr. A. P. D. Andrade*.

9. A CARNAC Scholarship, of Rupees 10 monthly, for the greatest practical proficiency in Compounding Medicine, to *Rustomjee Cowasjee*.

The SIR JAMSETJEE JEJEEBHOY Annual Medical Prize has been awarded by the Government Examiner to *Ruttonjee Hormusjee*.

C. MOREHEAD,
Principal, Grant Medical College.

APPENDIX S.

Written Questions in Chemistry, Anatomy, and Physiology, to 1st and 2nd Year Students, and in Medicine, Surgery, Midwifery, and Medical Jurisprudence, to 3rd and 4th Year Students.

1ST AND 2ND YEAR STUDENTS.

Chemistry.

1. Explain why ice in melting cannot have its temperature raised above 32° Fahr. ; and why the temperature of water boiling at any given altitude is always the same.

2. State the composition, and the mode of preparation of ammoniacal gas ; and explain the differences, in composition and qualities, between ammonia, amidogen, and ammonium.

3. Explain the phenomena that occur in charging and discharging a Leyden jar.

4. What are the changes that occur in the transformation of alcohol into acetic acid ? Give the empirical and rational formulæ of both alcohol and acetic acid.

H. GIRAUD, M.D.

13*th March* 1854.

Anatomy.

1. Name the bones which enter into the formation of the orbit. Describe the inner wall of this space, and any apertures that may be situated in it.

2. Enumerate the bones of the tarsus. Give a full account

of the articulations of the os calcis, and of the ligaments by which this bone is connected with other bones. Name any arteries that may be in relation with it.

3. Describe the extent, course, and relations of the brachial artery.

JOHN PEET,
Professor of Anatomy.

11*th March* 1854.

2ND YEAR STUDENTS.

Physiology.

1. Describe the act of deglutition.

2. Describe the pulmonary circulation of the blood. Explain its object, and its relation to the acts of inspiration and expiration.

C. MOREHEAD.

11*th March* 1854.

2ND AND 3RD YEAR STUDENTS.

Materia Medica.

1. What are the therapeutic properties of chalybeate medicines? Mention some of the most efficacious of them; with the manner in which they are administered, and their doses.

2. How, and from what plant is opium obtained? What is its chemical composition? What are the physiological effects which you would expect to result from the administration of five grains of opium to an adult not habituated to its use?

3. What officinal plants belong to the natural family "Umbiliferæ," and what medical substance is yielded by each of them?

4. How is tartar emetic prepared? What are its physiological actions?

HERBERT GIRAUD, M.D.

16*th March* 1854.

3RD AND 4TH YEAR STUDENTS.

Surgery.

1. Describe the symptoms and treatment of popliteal aneurism.

2. State how you would distinguish between concussion and compression of the brain.

3. The symptoms of strangulated femoral hernia?

JOHN PEET,
Professor of Surgery.

25*th March* 1854.

Medicine.

1. State the symptoms of the 1st stage of pneumonia. Describe the treatment you would adopt, and mention the circumstances that would guide you in the abstraction of blood.

2. What are the causes of remittent fever? Give an account of the mode of commencement and progress of a case of remittent fever, arising from malaria.

3. State the circumstances which contra-indicate the use of mercury in cases where its administration would be otherwise advisable.

C. MOREHEAD,
Professor of Medicine.

25*th March* 1854.

4TH YEAR STUDENTS.

Midwifery.

1. The shape, dimensions, and anatomical peculiarities of the fœtal head at the full period of utero-gestation.

2. How would you know that abortion was threatened, and how would you treat a case occurring in the earlier months of pregnancy?

3. Name those signs of pregnancy which do *not* depend upon the representation of the female supposed to be pregnant, but

which are made sensible to the medical attendant upon careful examination.

4. Describe briefly the progress of natural labours, and distinguished between true and false labour pains.

5. Give an account of the treatment of uterine hœmorrhage before, during, and after labour.

6. State what you know about the most fatal puerperal disease met with in India.

7. A child is born apparently dead—what means would you resort to to resuscitate it?

W. C. Coles, M.D.,
Acting Professor of Midwifery.

29*th March* 1854.

Medical Jurisprudence.

1. What are the duties of medical men with respect to the subject of assurance upon lives?

2. Define a medico-legal wound.

3. In a dead body found suspended by the neck, describe the principal signs with the view of determining whether the individual was hanged during life or after death.

4. Detail the symptoms of poisoning by a large dose of opium. Trace the progress of the case to a fatal termination, should the means adopted not prove efficacious, and state in what those means consist.

5. Describe briefly the most striking *post-mortem* appearances in acute arsenical poisoning.

6. State how you would perform a chemical analysis of the contents of a stomach supposed to contain corrosive sublimate.

W. C. Coles, M.D.,
Professor of Medical Jurisprudence.

28*th March* 1854.

APPENDIX T.

Result of Examination of 1st Year Students. Session 1853-54.

Nos.	Names.	Anatomy.	Chemistry.	Pharmacy.	Total.*	Remarks.
1	Jumnadas Hurgovindas	2	1	..	3	
2	A. P. D. Andrade	1	4	..	5	
3	Rustomjee Cowasjee	3	2	1	5	
4	Bhikajee Amroot	4	3	..	7	
5	Wamon Wasoodave	5	5	..	10	
6	Sorabjee Jahangeerjee	6	6	..	12	This student's examination in Anatomy has not been creditable to him.

* The lowest number marks the greatest merit.

C. Morehead, Principal, Grant Medical College.

Result of Examination of 2nd Year Students. Session 1853-54.

Nos.	Names.	Anatomy.	Physiology.	Chemistry.	Materia Medica.	Total.*	Remarks.
1	Cursetjee Framjee	1	1	1	3	6	
2	Cowasjee Nowrojee	2	2	2	1	7	
3	Bazunjee Rustomjee.....	3	3	3	2	11	

* The lowest number marks the greatest merit.

C. Morehead, Principal, Grant Medical College.

Result of Examination of 3rd Year Students. Session 1853-54.

Nos.	NAMES.	Medicine.	Surgery.	Total.*	REMARKS.
1	A. M. C. Continho.....	1	1	2	
2	Burjorjee Ardaseer.....	2	3	5	
3	Dheerajram Dulputram	3	2	5	
4	Cooverjee Dorabjee.....	4	2	6	
5	Angelino de Souza	5	4	9	

* The lowest number marks the greatest merit.

C. MOREHEAD, Principal, Grant Medical College.

Result of Examination of 4th Year Students. Session 1853-54.

Nos.	NAMES.	Medicine.	Surgery.	Midwifery.	Medical Jurisprudence.	Total.*	REMARKS.
1	M. A. Misquitta	2	1	3	1	7	
2	Rustomjee Merwanjee.....	2	1	1	3	7	
3	Henry Horne	1	2	2	2	7	
4	Hormusjee Bazunjee	3	3	4	4	14	

* The lowest number marks the greatest merit.

C. MOREHEAD, Principal, Grant Medical College.

APPENDIX U.

REPORT TO THE MEDICAL BOARD.

Sir,

I have the honour to report, for the information of the Medical Board, the Result of the Examinations for the Year 1853-54, held by the Principal and Professors of the Grant Medical College, in accordance with the 25th and 35th Articles of the Rules relative to the Subordinate Medical Department, dated 2nd April 1851.

2. The following 3rd Year Student-Apprentices presented themselves for examination :—

Vincent DeSouza.
E. Heffernan.
P. Drumm.
J. Sinclair.
C. F. Lewis.

The result of the examination is recorded in the annexed Tabular Statement marked I.

The appearance by the three first named in all the subjects on which they were examined was highly creditable to them. The Burnes Medal, presented by the Masonic Brethren of Bombay, was awarded to Vincent DeSouza.

The following Hospital Stewards, Assistant Apothecaries, and Native Hospital Assistants, presented themselves for examination :—

Mr. J. Anderson, } Hospital Stewards.
Mr. A. Wilson, }

Mr. R. Hudson, }
Mr. E. Brooks, } Assistant Apothecaries.
Mr. C. Thompson, }
Mr. G. Rozario, }

Mr. Francis St. Francis, First Hospital Assistant.
V. J. R. Cunha, Second Hospital Assistant.

The result of the examination is recorded in the Tabular Statement II.

Mr. W. Douglas, Assistant Apothecary, who has been already reported qualified in Anatomy, Physiology, Materia Medica, Chemistry, Medicine, and Surgery, has this year passed an examination in Midwifery and Medical Jurisprudence, and will receive the Certificate of Qualification.

The First Hospital Assistant and the four Student-Apprentices who by these examinations have become eligible for promotion to the Grade of Assistant Apothecary, rank in the following order :—

Vincent DeSouza.
E. Heffernan.
P. Drumm.
Mr. Francis St. Francis.
J. Sinclair.

I have the honour to be, Sir,
Your most obedient Servant,

C. Morehead,
Principal, Grant Medical College.

Bombay, 13*th April* 1854.

To F. Manisty, Esq.,
Secretary Medical Board, Bombay.

I.

Result of Examination of 3rd Year Student-Apprentices. Session 1853-54.

Names.	Anatomy.	Operative Surgery.	Physiology.	Materia Medica.	Chemistry.	Medicine.	Surgery.	Midwifery.	Medical Jurisprudence.	Remarks.
Vincent DeSouza.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
E. Heffernan	Qualified.	Qualified	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
P. Drumm.....	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
J. Sinclair	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
C. T. Lewis	Not Qualified.	Qualified.	Qualified.	Qualified.	Not Qualified.	Not Qualified.	Qualified.	Not Qualified.	Not Qualified.	Not Qualified.

C. Morehead, Principal, Grant Medical College.

II.

Result of Examination of Hospital Stewards, Assistant Apothecaries, and Hospital Assistants. Session 1853-54.

Names.	Anatomy.	Physiology.	Materia Medica.	Chemistry.	Medicine.	Surgery.	Midwifery.	Medical Jurisprudence.	Remarks.
Joseph Anderson	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
Alexander Wilson	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
Richard Hudson	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
Edward Brooks.....	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
Charles Thompson	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
G. Rozario.....	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
Francis St. Francis.....	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
V. J. R. Cunha	Not Qualified.	Not Qualified.	Absent.	Absent.	Absent.	Absent.	Absent.	Absent.	Not Qualified.

C. Morehead, Principal, Grant Medical College.

APPENDIX V.

REPORT TO THE MEDICAL BOARD.

SIR,

I have the honour to transmit, for the information of the Medical Board, Tabular Statements I. and II., exhibiting the Results of the Examination of the 1st and 2nd Year Student-Apprentices.

The following Prizes were, at the opening of the Session, placed at the disposal of the College by the Physician General :—

For the most proficient Candidate for admission as Student-Apprentice :—

1. Quain's Anatomy,
   Fowne's Chemistry.

For the most proficient 1st Year Student-Apprentices :—

2. Watson's Practice of Physic,
   Fergusson's Practical Surgery,
   Taylor's Medical Jurisprudence,
   Kirk's Physiology ;
3. Christison's Dispensatory,
   Williams' Principles of Medicine,
   Churchill's Midwifery ;
4. Kirk's Physiology,
   Christison's Dispensatory.

The 1st Prize was presented to P. Grogan, the 2nd, 3rd, and 4th Prizes to J. Kinloch, J. Silvester, and Dhunjeebhoy Cowasjee.

In the month of January last, two Prizes were placed at the disposal of the College by the Warrant Medical Officers of the Presidency, for the reward and encouragement of the 2nd Year Student-Apprentices. The letter communicating this second instance of praiseworthy liberality on the part of the Warrant

Medical Officers of the Presidency, and my reply thereto, are annexed to this report :—

These Prizes—

1. Watson's Practice of Physic,
   Taylor's Medical Jurisprudence,
   Christison's Dispensatory ;
2. Cooper's First Lines in Surgery,
   Murphy's Midwifery,
   Carpenter's Physiology,
   Wilson's Anatomist's Vade-Mecum,
   Fowne's Chemistry ;

have been presented to H. Washington and S. Cavanagh. The merits of these two Student-Apprentices were equal. The Examiners were unable to prefer the one to the other.

I have the honour to be, Sir,
Your most obedient servant,

C. Morehead,
Principal, Grant Medical College.

Bombay, 13th April 1854.

To F. Manisty, Esq.,
Secretary Medical Board.

To C. Morehead, Esquire,
Principal, Grant Medical College,
Bombay.

Sir,

The Medical Warrant Officers at the Presidency named in the margin are desirous of awarding a Prize at the termination of the examination in March and April next to the best, or, in case you should consider it capable of being divided, to the two best 2nd Year Student-Apprentices who shall pass through the examinations with the greatest

Apothecary W. Vitters.
" H. Webb.
" T. Blaney.
Steward J. Anderson.
Asst. Apy. J. Leahy.
" Douglas.
" Tatia Mahdowjee.
" Bhow Ramjee.
" E. H. Cook.
" W. Conway.
" I. N. Carlos.

credit. I have the pleasure of communicating the wishes of these Warrant Officers that they be permitted to carry out their views, and am desired to intimate that the Prize is to consist of the following works :—

1, Watson's Practice of Physic	1 copy,	2 vols.
2, Cooper's First Lines in Surgery.....	1 „	1 vol.
3, Murphy's Midwifery	1 „	1 „
4, Taylor's Medical Jurisprudence.....	1 „	1 „
5, Christison's Dispensatory	1 „	1 „
6, Carpenter's Physiology	1 „	1 „
7, Wilson's Anatomy	1 „	1 „
8, Fowne's Chemistry.....	1 „	1 „

2. I am directed to add, that should you consider any of the above works objectionable, the Warrant Medical Officers are prepared to exchange them for others more suitable.

I beg to remain, Sir,
Your most obedient Servant,

(Signed) THOMAS BLANEY,
Apothecary, European General Hospital.

Bombay, 20th January 1854.

(True copy)

C. MOREHEAD,
Principal, Grant Medical College.

No. 2 OF 1854.

Grant Medical College, Bombay, 21st January 1854.

SIR,

I have the honour to acknowledge the receipt of your letter of yesterday's date, conveying to me the desire of your brother officers and yourself to present Prizes of Books to the two best 2nd Year Student-Apprentices at the close of the present College Session, and to acquaint you that it will afford me much pleasure to give effect to your wishes.

The books selected by the Medical Warrant Officers at the Presidency are in every respect suitable, and it cannot but be gratifying, and of much advantage to these young men, to be made thus sensible of the interest which their seniors take in their progress, and of the very liberal sentiments by which they are actuated.

I have the honour to be, Sir,
Your most obedient Servant,

(Signed) C. MOREHEAD,
Principal, Grant Medical College.

To Mr. T. BLANEY,
Apothecary, E. G. Hospital.

(True copy)
C. MOREHEAD,
Principal, Grant Medical College.

I.

Result of Examination of 1st Year Student-Apprentices. Session 1853-54.

Nos.	Names.	Anatomy.	Chemistry.	Materia Medica.	Total.*	Remarks.
1	J. Kinloch	2	1	1	4	
2	J. Silvester	1	2	3	6	
3	Dhunjeebhoy Cowasjee	4	2	3	9	
4	Pandoo Chawan	3	5	2	10	
5	J. M. O'Brian	6	3	5	14	
6	W. Wilson	5	4	6	15	
7	Ellapah Lingoo	5	6	6	17	
8	J. Neil	4	9	5	18	
9	R. L. McLean	3	8	7	18	
10	J. H. Bedford	4	9	7	20	
11	A. Collins	4	10	8	22	
12	W. Duggan	7	11	9	27	
13	G. Lloyd	8	12	8	28	
14	E. McGeoch	Absent, sick.	7	4	11	Not classed.

* The lowest number marks the greatest merit.

C. Morehead, Principal, Grant Medical College.

II.

Result of Examination of 2nd Year Student-Apprentices. Session 1853-54.

Nos.	Names.	Anatomy.	Physiology.	Medicine.	Surgery.	Total.*	Remarks.
1	S. Cavanagh.....	1	1	1	1	4	
2	H. Washington	1	1	1	1	4	
3	F. Pinto	4	4	2	2	12	
4	C. Stephens	3	3	3	3	12	
5	D. Oneil	5	5	4	4	18	

* The lowest number marks the greatest merit.

C. Morehead, Principal, Grant Medical College.

APPENDIX W.

DONATIONS TO THE MUSEUM.

From the Jamsetjee Jejeebhoy Hospital.

1. Scirrhus of æsophagus.
2. Exfoliation from the parietal bones.
3. Three small fibrous tumours, removed from the lobes of the ears of a boy.
4. Calculus extracted from the urethra of a child.
5. Necrosis of the palate bone.
6. Bones of the elbow joint, removed by amputation after unsuccessful resection.
7. Vesico-uterine fistula, caused by ulceration.
8. Pendulous fibro-cellular tumour, removed by incision from the labium of a female.
9. Bladder and kidneys of a patient, showing extensive ulceration of the mucous membrane of the bladder. A phosphatic calculus was extracted by incision, apparently from the prostate gland, but he died a few days afterwards, being in a very reduced state before admission.

   The left kidney is enlarged and granular, the right atrophied.
10. Bones of a boy of 12 years old.
11. Antero-posterior curvature of the spine, from caries of the vertebræ.
12. Bones of a girl of 4 years.
13. Hyperostosis of bodies of vertebræ.
14. Caries of elbow-joint, removed from a patient who died of phthisis.

15. Disease of heart : thickening of aortic and mitral valves, with hypertrophy of left ventricle.
16. Left kidney of a patient who died of phthisis, containing numerous calculi.

From the Obstetric Institution.

17. Child at full period.
18. Fœtus with placenta.
19. Child at full period.

From Dr. Bowie, Hydrabad.

20. Disease of testicle.
21. Caries of the bones of the foot, with bony anchylosis of ankle-joint.
22. Hyperostosis of femur, from chronic inflammation.
23. Rupture of the spleen.
24. Lung, showing the results of pleurisy and pneumonia.
25. Diseased kidney.
26. Hypertrophy and gangrene of spleen.
27. Caries of the skull.
28. Necrosis of tibia.

From Dr. Kellie, H. M.'s 86th Regiment.

29. Aneurism of aorta, constricting the æsophagus, and bursting into the abdomen.
30. Malignant disease of the testicle, removed by operation.

From Dr. Arnott, Aden.

31. Necrosis of parietal bone, from the head of a Somali boy whose scalp was lacerated by a tiger.

From Dr. Mead, European General Hospital.

32. Bony deposit between the layers of the falx cerebri.

From Dr. Pitman, Tanna.

33. Ununited fracture of radius and ulna.

From Dr. Lawes.

34. Specimens of calculi removed by operation. Forwarded by the Medical Board.

From Dr. Thom, 1st Fusiliers.

35. Aneurism of aorta, bursting into trachea.
36. Disease of liver: fatty degeneration.

From Dr. Impey.

37. Two calculi (one encysted) removed by operation. From Medical Board.

From Dr. Haines.

38. Aneurism of aorta, bursting into left bronchus.

From Dr. Peele.

39. Tibia of an ostrich.

From Dr. Campbell, Lunatic Asylum.

40. Specimen of horse-shoe kidney.

From Dr. Crawford.

41. Lizard from Burmah.

From Mr. Conway, Assistant Apothecary.

42. Comminuted fracture of tibia.
43. Malignant disease of stomach.
44. Atheromatous degeneration and dilatation of aorta.

From V. DeSouza, Student-Apprentice.

45. Three skeletons of small birds.

From J. Sinclair, Student-Apprentice.

46. Three small fishes.

From D. O'Neil, Student-Apprentice.

47. Specimens of small snakes.

G. R. Ballingall,
Curator.

APPENDIX X.

GRANT MEDICAL COLLEGE.

Notification.

The Willoughby Medical Prize, of Rs. 300, to be awarded in the first week of April 1854, to that Graduate of the Grant College who presents the best Report of Medical and Surgical Practice.

The Report is to be drawn up exclusively from Cases of Medical and Surgical Disease treated by the author, subsequent to the date of his graduation. It should be in every respect practical. The statement of the phenomena of the cases of disease treated of in the Report must be clear and succinct, must embrace a concise inquiry into the causes, and the best means of prevention, and offer an explanation of the indications observed in the treatment, the means by which it was attempted to fulfil these, and the success with which they were attended.

It is desirable that the Reports should not be in the hand-writing of the authors. They are to be transmitted to the Secretary to the Board of Education, so as to reach his office on or before the 15th of March 1854.

Each Report is to be accompanied by a sealed note, containing the name of the author, and superscribed with a Motto similar to one affixed to the Report.

The Prize will be awarded in accordance with the decision of a Committee, to consist of the Government Examiner, the Secretary to the Board of Education, the Principal of the Grant College, and the Professors of Medicine and Surgery. In the event of an equality of votes, the decision will rest with the Government Examiner.

By order of the Board of Education,

M. Stovell,

Board of Education, 25th October 1853. Secretary.

APPENDIX Y.

PROCEEDINGS OF THE GRANT COLLEGE MEDICAL SOCIETY DURING THE SESSION 1853-54.

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Saturday the 9th July 1853, at 8 o'clock P. M.

Present—

Dr. W. C. Coles ..... *President.*
Mr. Bhawoo Dajee ..... *Vice-President.*

Members.

Dr. C. Morehead; Messrs. Atmaram Pandoorang; Merwanjee Sorabjee; Narayan Dajee; Dossabhoy Bazunjee; and S. A. de Carvalho, *Secretary.*

The proceedings of the last meeting were read and confirmed.

The following letters were read, and the accompanying donation laid before the Society:—

1. From the Secretary to the Medical Board, Bombay, presenting to the Society a copy of an "Investigation of the Dust-storms and Whirlwinds of India. By Surgeon P. F. H. Baddeley, of the Bengal Medical Service."

2. From the Principal of the Grant Medical College, presenting a copy of the "Report of the Grant Medical College, for the Session 1852-53."

3. A copy of the "Medical Topography and Statistics of the Nizam's Station and Army. By Superintending Surgeon R. Riddell, of the Nizam's Army."

4. From the Secretary of the Grant College Medical Society to the Secretary to the Medical Board, to the Principal of the

Grant Medical College, and to Mr. Riddell, returning the best thanks of the Society for their donations.

It was then proposed by Dr. Coles, and seconded by the Secretary, that in accordance with the 3rd paragraph of the Regulations, Mr. Rustomjee Byramjee and Ardaseer Jamsetjee be nominated candidates for admission to the Society; after which, Dr. Coles read a paper "On the Choice of Means to be employed in Tedious and Difficult Labours." He commenced by detailing a case of tedious labour that had lately occurred in the Obstetric Ward of the Jamsetjee Jejeebhoy Hospital, in which ergot of rye was made use of. It appeared that the female was in labour with her first child, that the difficulty arose from want of uterine action in the second stage of the process, that the presentation was natural, and that the solid and soft parts were in a favourable condition. A dose of ergot was given, and repeated in an hour and a half, when, after an interval of ten minutes, a dead full grown male fœtus was expelled.

Dr. Coles alluded to the causes of delay in the second stage of labour, to the clear definition given of them by Dr. Murphy in his published lectures under the terms "arrest" and "impaction," and to ill consequences by exhaustion or inflammation, "likely to result should no assistance be afforded." The available means were then enumerated, consisting in slight cases of time and patience; in other instances of a moderate dose of opium, and under urgent circumstances of the use of ergot of rye, or of electricity or instruments.

These three last modes of bringing about uterine action were then examined, and the different writers upon midwifery quoted with respect to their selection. A preference was expressed to the use of electricity, as occasioning no injury or danger to the life of the child; and it was stated, upon the authority of the Dublin Lying-in Hospital Reports, that in the majority of cases where ergot was given, unless born very speedily, the child invariably perished. With regard to electricity in midwifery, it was mentioned that the results of its employment in the second stage of labour varied in the hands of different practitioners; but most of them agreed as to its value in bringing about uterine

contractions in hœmorrhage after the birth of the child, or after the expulsion of the placenta.

A somewhat minute account of the use of ergot of rye during the second stage of labour was then gone into, embracing the following heads :—

1*st*.—As to its acknowledged oxyototic power, and the period when its action begins.

2*nd*.—As to its influence upon the pulse of the mother, and upon the circulation of the child.

3*rd*.—As to its subsequent effects upon the uterus, or upon the discharges.

4*th*.—As to the conditions necessary for its safe employment, and the particular cases in which it should be given.

5*th*.—As to the *mode* and form of its exhibition, and particularly as to the quality of the drug.

Attention was then directed to the necessity of employing the stethoscope in all cases in which ergot was given, and of very carefully attending to its indications. This point was dwelt upon as of the last importance, to enable a proper selection to be made of the means to be had recourse to.

The paper concluded by bringing forward the circumstances under which instruments would be more particularly required in the cases under consideration.

After a short discussion, it was announced by the President that a paper on "Dietetics" would be read by Mr. Bhawoo Dajee at the next meeting, to be held on Saturday the 15th August.

Proposed by Dr. Morchead, and seconded by the Secretary, that the best thanks of the Society be acceded to Dr. Coles for his interesting communication.

(Signed) W. C. Coles, M.D., *President*.
„ S. A. de Carvalho, *Secretary*.

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Saturday the 15th August 1853, at 8 o'clock P. M.

Present—

Dr. W. C. Coles ..... *President.*
Mr. Bhawoo Dajee ..... *Vice-President.*

Members.

Dr. C. Morehead; Messrs. Atmaram Pandoorang; Narayan Dajee; Dossabhoy Bazunjee; and S. A. de Carvalho, *Secretary.*

Visitor.

Mr. Ardaseer Jamsetjee.

The proceedings of the last meeting were read and confirmed.

A letter was read from the Acting Secretary to the Madras Council of the Medical College, acknowledging with thanks the receipt of five copies of the proceedings of the Society.

Dr. Coles then proposed the admission of Messrs. Rustomjee Byramjee and Ardaseer Jamsetjee as Members of the Society; and the proposition was, without ballot, unanimously carried.

A paper was next read by Mr. Bhawoo Dajee on the "Diet of the Natives of Western India," in which a description of the nature of the food employed by the different Indian tribes was given, with the quantities of the different articles consumed, their modification by age and sex, and the hours of meals.

After its conclusion, and a short discussion upon the subject of the paper, it was proposed by Dr. Morehead, and seconded by Mr. Bhawoo Dajee, that Members of the Society, in charge of public or private Dispensaries, be requested to forward to the Secretary, as soon after the 1st of each month as possible, (so as to reach Bombay before the 10th,) a return of the sick attending the Dispensary, with full remarks, such as are likely to prove interesting and worthy of record.

The Secretary then read a communication from Mr. Muncherjee Sorabjee, describing the removal of a fatty tumour, weighing 2 lbs., situated near the base of the right axilla, from a Rajpoot about 30 years of age.

The best thanks of the Society were accorded to Messrs. Bhawoo Dajee and Muncherjee Sorabjee for their communications, and the meeting was adjourned to Saturday the 10th September,

when a continuation of the paper on dietetics by Mr. Bhawoo Dajee was announced.

(Signed) W. C. COLES, M.D., *President.*
„ S. A. DE CARVALHO, *Secretary*

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Saturday the 10th September 1853, at 8 o'clock P. M.

Present—

Dr. W. C. Coles ..... *President.*
Dr. H. Giraud..... *Vice-President.*

Members.

Drs. Morehead and Ballingall; Messrs. Atmaram Pandoorang; Narayan Dajee; Dossabhoy Bazunjee; Rustomjee Byramjee; Ardaseer Jamsetjee; and S. A. de Carvalho, *Secretary.*

Visitor.

Dr. T. M. Lownds.

The proceedings of the last meeting were read and confirmed.

Letters read:—

1. From the Secretary to the Council of Education, Calcutta, acknowledging with thanks the receipt of five copies of the proceedings of the Society.

2. From Messrs. Sub-Assistant Surgeons Rustomjee Byramjee and Balkristna Chintoba, acknowledging the receipt of a copy of the proposition passed at the last meeting of the Society, and forwarding, for the use of the Society, each a copy of the monthly return of the sick attending the Bandora and Poona Dispensaries, in their charge.

The paper on dietetics by Mr. Bhawoo Dajee, owing to his unavoidable absence from indisposition, was postponed to a future meeting.

At the suggestion of Dr. Morehead, the Secretary then read

the remarks appended to the returns of the Bandora and Poona Dispensaries, in which an abstract of the patients attending the Dispensary, the prevalent diseases, the interesting cases that presented themselves, and the course of treatment adopted, are given.

Mr. Ardaseer Jamsetjee then read—

1. "Notes on a case of partial Hypertrophy of the Scrotum, studded with a peculiar Eruption."

The case was interesting from the lengthened period of 18 years during which the hypertrophy existed, without increase of size. This Mr. Ardaseer was disposed to attribute to the presence of the eruption, by which a quantity of milky fluid oozed out, which separated, on standing, into a coagulum and a liquid portion, the latter containing fat globules. There were periods in which the discharge increased in quantity, amounting sometimes to 10 oz., without any constitutional disturbance, and these (periods) Mr. Ardaseer thought to be analogous to those of exacerbation in ordinary cases, in which the hypertrophied scrotum increases in size, showing the beneficial process nature adopted in the case related, to get rid of the fibrinous and fatty elements, which in ordinary cases is deposited in the interstices of the tissue of the scrotum.

2. A "Case of Diabetes," occurring in a Parsee, was next related, in which the symptoms of the disease were well marked, but the treatment adopted was without avail. The patient was recommended for admission into the Jamsetjee Jejeebhoy Hospital, where he is at present.

3. A "Case of Poisoning by Gamboge," occurring in a Parsee female aged 19, was detailed. About 3 drs. of the drug were taken for a suicidal purpose, and symptoms of irritant poison, followed by collapse, were thereby brought on; but the patient recovered under the use of stimulants.

After a short discussion, the thanks of the Society were accorded to Mr. Ardaseer Jamsetjee for his interesting cases, and it was announced by the President, that the following communication would be presented to the Society by Mr. Dossabhoy

Bazunjee :—"Notes on a Case of Abortion, with Retention of Placenta," and one followed by tetanus.

The meeting was then adjourned to Saturday the 8th October 1853.

(Signed) W. C. Coles, *President.*
„ S. A. de Carvalho, *Secretary.*

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Saturday the 8th October 1853, at 8 o'clock P. M.

Present—

Dr. W. C. Coles ..... *President.*
Dr. H. Giraud..... *Vice-President.*

Members.

Dr. C. Morehead; Messrs. J. C. Lisboa; Atmaram Pandoorang; P. F. Gomes; Narayan Dajee; Dossabhoy Bazunjee; Rustomjee Byramjee; Ardaseer Jamsetjee; and S. A. de Carvalho, *Secretary.*

Visitor.

H. J. Carter, Esq.

The proceedings of the last meeting were read and confirmed.

The following Donation, received through Dr. Morehead, was laid before the Society, viz. "A Lecture on Anatomy, in its relations to the Arts of Design. By G. Smith, M.D., Professor of Anatomy and Physiology, Madras Medical College." Presented by the Author.

The Secretary then brought before the Society the returns received from the Bandora and Poona Dispensaries, and of the Jamsetjee Jejeebhoy Hospital and Female Dispensary, and read the remarks appended to each.

The communication announced was then read by Mr. Dossabhoy Bazunjee.

1. A "Case of Abortion," occurring in a Parsee Female, aged 26 years, in her third month of pregnancy. The uterine pains commenced on the night of the 24th April, and the fœtus was

expelled the next day. Four days after, rigidity of the jaws showed itself, which continuing for four days, occasional startings of the limb in the night were superadded. Twelve days after, menstruation appeared, and on the same day spasmodic contractions of the muscles of the back and lower extremities were observed, with rigidity of the muscles of the neck and abdomen. Three days after, slight amelioration in the tetanic symptoms was noted, and which continued steady and gradual, and the case finally terminated in recovery.

The treatment consisted in the free administration of quinine and extract of hemp, and a good and nourishing diet.

2. The next case related was also one of miscarriage in the fifth month, occurring also in a Parsee female, aged 40 years.

The interest the case presented was the retention of the placenta with the umbilical cord in the uterus for forty-eight hours after the expulsion of the fœtus. No hœmorrhage attended its discharge, and no untoward event marked the issue of the case.

After some discussion upon the interesting points the above cases presented, the Secretary read a communication from Mr. Sub-Assistant Surgeon Anunta Chundroba, giving an "Outline of the Topography of Sardarpore," describing the nature of the country, its seasons, and prevailing winds, and the character of the diseases prevalent in each season and month, dwelling chiefly upon the malarious fevers there prevalent, their causes and treatment; and the paper terminated with an account of the Malwa Bheel Corps.

After its conclusion, the best thanks of the Society were accorded to the authors of the communications read, and the meeting was adjourned to Saturday the 12th November 1853.

(Signed) W. C. Coles, *President.*
,, S. A. de Carvalho, *Secretary.*

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Saturday the 12th November 1853, at 8 o'clock P. M.

Present—

Dr. W. C. Coles..... *President.*
Mr. Bhawoo Dajee..... *Vice-President.*

Members.

Messrs. J. C. Lisboa; Atmaram Paudoorang; Narayan Dajee; Dossabhoy Bazunjee; and S. A. de Carvalho, *Secretary.*

The proceedings of the last meeting were read and confirmed.

The Secretary brought before the Society the returns received from the several dispensaries, and read the remarks detailed, and the interesting cases which they presented.

Dr. Coles then laid upon the table different specimens of midwifery forceps, and made some observations upon their history, original construction, and the modifications they had undergone up to their present most approved shapes and forms, remarking upon the propriety and otherwise of their applicability, and the circumstances under which their use may be rendered necessary.

After a short discussion, the meeting was adjourned to Saturday the 10th December 1853.

(Signed) W. C. Coles, *President.*
,, S. A. de Carvalho, *Secretary.*

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Saturday the 10th December 1853, at 8 o'clock P. M.

Present—

Dr. W. C. Coles..... *President.*

Members.

Dr. C. Morehead; Messrs. J. C. Lisboa; Atmaram Pandoorung; Ardaseer Jamsetjee; and S. A. de Carvalho, *Secretary.*

The proceedings of the last meeting were read and confirmed.

The several dispensary returns that had been received were submitted, and the remarks appended to them read.

A letter was then read from the Secretary to the Medical Board, Bombay, forwarding copy of a "Return of Persons Vaccinated throughout the Bombay Presidency for the Year 1852-53," and directing the attention of the Society to the want

of appreciation of the benefits of vaccination by the community, at the same time requesting the Society's co-operation.

After the report had been read, and the several points therein referred to were discussed, Dr. Morehead suggested the formation of a committee to inquire into and report upon the subject of vaccination, with reference to its present state in the community, the causes of its non-appreciation, and the best means to secure its extension; and it was accordingly resolved that the following gentlemen be requested to become members of the committee, viz:—Dr. Morehead; Messrs. Bhawoo Dajee; Atmaram Pandoorang; Dossabhoy Bazunjee; Ardaseer Jamsetjee; and S. A. de Carvalho.

The best thanks of the Society were recorded for the Medical Board's valuable donation, and it was proposed that the Medical Board be informed of the Society's willingness and readiness in forwarding their views, and the meeting was adjourned to Saturday the 14th January 1854.

(Signed) W. C. COLES, *President.*
„ S. A. DE CARVALHO, *Secretary.*

Minutes of the Annual Meeting of the Grant College Medical Society, held in the College Library, on Saturday the 14th January 1854, at 8 o'clock P. M.

Present—

Dr. W. C. Coles ..... *President.*
Dr. Giraud ..... } *Vice-Presidents.*
Mr. Bhawoo Dajee ..... }

Members.

Dr. C. Morehead; R. Haines, Esq.; Messrs. J. C. Lisboa; Atmaram Pandoorang; P. F. Gomes; Narayan Dajee; Dossabhoy Bazunjee; and S. A. de Carvalho, *Secretary.*

Visitor.

J. H. Sylvester, Esq.

The proceedings of the last meeting were read and confirmed.

The annual accounts of the Society were laid before the meeting.

The following gentlemen were found duly elected Office-bearers for the ensuing year :—

Dr. H. Giraud ..... *President.*
Dr. W. C. Coles ..... } *Vice-Presidents.*
Mr. Bhawoo Dajee ..... }

Secretary.

Mr. S. A. de Carvalho.

Dr. Giraud, on taking the chair, expressed the gratification he derived at being elected President, and entertained the hope that the advancement and improvement of the Society as in former years would steadily increase, and which it would be his endeavour on all occasions to further.

Mr. Bhawoo Dajee then read a short address, showing the favourable condition in which Members of the Society are placed, and the good that it is in their power to effect, by availing themselves of the means at their disposal.

It was then proposed and unanimously carried, that the best thanks of the Society be accorded to Dr. Coles for his valuable services as President during the past year.

The following papers were announced to be read by Mr. Lisboa at the next meeting, viz :—

" Notes on Cases of Traumatic Gangrene, followed by Tetanus."

" Notes on a Case of Lithotomy."

(Signed) H. Giraud, *President.*
„ S. A. de Carvalho, *Secretary.*

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Saturday the 11th February 1854, at 8 o'clock P. M.

Present—

Dr. H. Giraud ..... *President.*
Dr. W. C. Coles ..... *Vice-President.*

Members.

Messrs. J. C. Lisboa ; Atmaram Pandoorang ; P. F. Gomes ; Narayan Dajee ; Dossabhoy Bazunjee ; Burjorjee Dorabjee ; and S. A. de Carvalho, *Secretary.*

Visitor.

J. H. Sylvester, Esq.

The proceedings of the last meeting were read and confirmed.

Read :—1. A letter from Mr. Merwanjee Sorabjee, tendering his resignation as a Member of the Society.

2. Report from the Chairman of the Committee appointed by the Society to inquire into the best means of assisting in the extension of Vaccination in the island of Bombay, and the Resolutions passed at their meeting held on the 10th December, for transmission to the Medical Board.

The returns from the several Dispensaries were laid on the table, and the remarks appended to them were read.

The following donation was laid before the Society :—" Clinical Report on the Cases of Pneumonia treated in the Clinical Ward of the Jamsetjee Jejeebhoy Hospital. By Dr. C. Morehead." Presented by the Author.

Mr. Lisboa then read a paper entitled " Notes on Cases of Traumatic Gangrene, followed by Tetanus."

Seven cases of traumatic gangrene were related by him, in six of which amputation was had recourse to. Of these one proved successful, and the remaining five terminated fatally by tetanus. The seventh case also proved fatal by tetanus, amputation not having been performed.

Two cases of constitutional grangrene were next mentioned ; one, in which the operation had not been performed, terminated fatally by tetanus, and the other died of dysentery after operation.

Mr. Lisboa attempted by these cases to corroborate the statement of Mr. Peet as to the relation that would seem to exist between gangrene and tetanus, and to prove that gangrene may sometimes be one of the influential causes in exciting tetanus in this country. Mr. Lisboa then alluded to cases of puerperal tetanus, and expressed a strong suspicion that tetanus might

in these cases also depend on the presence of a sloughy and perhaps gangrenous surface—a diseased uterus after delivery ; and he concluded by referring to cases of tetanus following contused and lacerated wounds, in which a similar condition was present, viz. a more or less sloughy surface.

After some discussion upon the interesting points alluded to in the paper, the best thanks of the Society were accorded to Mr. Lisboa for his interesting communication, and the meeting was adjourned to Saturday the 11th March 1854.

The next paper announced, "Notes on a Case of Lithotomy," was postponed to a future meeting.

(Signed) Bhawoo Dajee, *President.*
„ S. A. de Carvalho, *Secretary.*

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Saturday the 11th March 1854, at 8 o'clock P.M.

Present—

Mr. Bhawoo Dajee *(in the Chair)*
Dr. W. C. Coles..... ..... } *Vice-Presidents.*

Members.

Messrs. J. Peet; J. C. Lisboa; Atmaram Pandoorang; Narayan Dajee; Dossabhoy Bazunjee; Rustomjee Byramjee; and S. A. de Carvalho, *Secretary.*

Letters read :—

1. From the Medical Board, thanking the Society for the Report of the Vaccination Committee.

2. From ditto, presenting to the Society copy of a "Report on the Civil Dispensaries in the Madras Presidency, for 1852."

The following donation from Mr. Peet was accepted with thanks by the Society, viz :—

1. "Report on National Education. By Mr. Wesban."

2. "Rules of the Royal Society of Van Dieman's Land."

3. "Report and Proceedings of the Royal Society of Van Dieman's Land."

4. "The Tasmanian Athenæum."

A general return from the Committee on the subject of Vaccination was laid on the table, and the remarks from the several Dispensary Returns were then read.

The communication announced was then read by the Secretary. It embraced the history of four cases of purulent diathesis that had come under his observation subsequent to the paper read by him in April last; with observations and remarks upon the nature of each, &c.

The causes, pathology, and treatment of the disease were chiefly alluded to, and in regard to the two former, viewing the affection as an instance of blood disease, a belief was expressed as to the probability of its being sometimes spontaneously generated from some unknown vitiated condition of the atmosphere, or some change in the constitution of the individual, or perhaps both, independent of phlebitis.

After a short discussion, the meeting was adjourned to Saturday the 8th April 1854, when it was announced that the following communication will be presented by Dr. Giraud, viz :—

" Notes on a Case of Poisoning by Opium and Arsenic."

(Signed) H. GIRAUD, *President.*
„ S. A. DE CARVALHO, *Secretary.*

Proceedings of a Meeting of the Committee of the " Grant College Medical Society" appointed to inquire into the subject of Vaccination, held in the College Library, on Friday the 10th December 1853, at 4 P. M.

Present—

Dr. C. Morehead; Messrs. Atmaram Pandoorang; J. C. Lisboa; P. F. Gomes; Ardaseer Jamsetjee; and S. A. de Carvalho, *Secretary.*

The following Report by the Chairman was read and approved :—

Report of the Committee appointed by the Grant College Medical Society on the 10th December to inquire into the best Means

of assisting in the Extension of Vaccination in the Island of Bombay.

Members.

Dr. Morehead.	Mr. Ardaseer Jamsetjee.
Mr. Bhow Dajee.	Mr. Dossabhoy Bazunjee.
Mr. Atmaram Pandoorang.	Mr. S. A. de Carvalho.

The Committee appointed to inquire into the means by which the Grant College Medical Society may best co-operate with the Medical Board in extending Vaccination in the island of Bombay, came to the conclusion that the only manner in which this assistance can be effectually rendered, is by increasing the number of Vaccinating Stations in the island, and by endeavouring to extend the knowledge of the advantages and objects of the practice.

With the view of making arrangements for carrying out these views, the Committee requested the attendance, at one of their meetings, of the Graduates of the Grant College, now practising in Bombay, as well as that of Assistant Professor Dadabhoy Nowrojee, and other intelligent Teachers of the Elphinstone Institution.

All the Graduates expressed their willingness and readiness to take charge of Vaccinating Stations, and to use their best exertions in the cause. Dr. Bremner, also, and Dr. Yuill, as officers of the Native Dispensary, kindly promised their assistance.

It was in consequence determined to establish the following Stations in addition to the Government Office :—

Vaccination is practised guatuitously at the following Stations in Bombay :—

Stations.	Days.	Hours.	By
Jamsetjee Jejeebhoy Hospital	Thursday.	8 A.M.	Medical Officers of the Hospital.
Nagdevi Charitable Dispensary, Nagdevi Road	Monday.	8 A.M.	Mr. Bhawoo Dajee.
Mr. Bhawoo Dajee's Fort Dispensary	Monday.	8 A.M.	Mr. Narayan Dajee.
Fort Gratuitous Dispensary..	Tuesday.	1 P.M.	Mr. Burjorjee Dorabjee.
Bombay Native Dispensary, Esplanade, Picket	Friday.	11 A.M.	Dr. Bremner.
Bombay Native Dispensary, Branch Colaba	Saturday.	10 A.M.	Dr. Yuill.
Matharpacady	Monday.	11 A.M.	Mr. S. A. de Carvalho.
Mazagon, at Mr. Ardaseer Jamsetjee's Dispensary ..	Tuesday.	11 A.M.	Mr. S. A. de Carvalho.
Erskine Road	Tuesday.	11 A.M.	Mr. Atmaram Pandurang.
Cande Waddy, at Mr. Atmaram Pandurang's Residence ..	Monday.	11 A.M.	Mr. Atmaram Pandurang.
Boleshwar, at Mr. Bhawoo Dajee's Residence, near the Great Portuguese Church	Tuesday.	11 A.M.	Mr. Narayan Dajee.
Cavel, Kalbadevi, near the Portuguese Charity School ..	Monday.	11 A.M.	Mr. J. C. Lisboa.
Mandevi Nundoo Mooljee's Wakhar, at Khand Bazaar ..	Tuesday.	8 A.M.	Mr. Bhawoo Dajee.
Surkari Wakhar, at Bhaht Bazaar..	Monday.	8 A.M.	Mr. Ardaseer Jamsetjee.
Chunden Waddy, near Hormusjee Wadia's Autush Byram.	Monday.	2 P.M.	Mr. Dossabhoy Bazunjee.
Colaba, opposite to the new Church	Tuesday.	11 A.M.	Mr. P. F. Gomes.
Bandora Charitable Dispensary	Monday.	11 A.M.	Mr. Rustomjee Byramjee.
Mahim	Tuesday.	11 A.M.	Mr. Rustomjee Byramjee.

With the view of familiarising the Native community with the advantages of Vaccination, the short memorandum which accompanies this was drawn up : 1,500 copies of the English, and 10,000 of the Mahratta and Guzerattee versions have been printed, and to some extent distributed.

In order to defray the cost of printing, and the other charges incidental to the measures entered upon and contemplated, an endeavour is being made to raise a small fund by subscription.

Immediately on the completion of these preliminary arrangements, the Superintendents of the several Stations entered upon their duties, and adopted measures for the introduction of Vaccination.

They have since met weekly at the Grant College, with the object of comparing their proceedings, deliberating, and devising means of overcoming the difficulties they have experienced.

During the month that has elapsed since these plans were entered upon, Vaccination has been partially introduced at the Jamsetjee Jejeebhoy Hospital, the Nagdevi Charitable Dispensary, Mr. Bhawoo Dajee's Fort Dispensary, the Fort Gratuitous Dispensary, Matharpacady, Cande Waddy, Cavel, and at Colaba.

In all about 70 children have been vaccinated.

The difficulties which have been experienced consist in the inadequate supply of children in the first instance from the Government Vaccination Office, and in the unwillingness on the part of those whose children have been vaccinated to bring them for inspection, and to allow lymph to be taken for the Vaccination of others.

The latter difficulty has been felt at all the Stations.

The removal of this and other matters of detail at present engage the earnest attention of the Committee.

It is the intention of the Committee to meet on the first Friday of every month, to prepare a return (according to form No. 52 B, No. 2 of the late Government Regulations) of the Vaccinations at the several Stations during the preceding month, and to draw up a report of the proceedings during the month, to be submitted to the Society at their ensuing monthly meeting.

By a steady perseverance in this course, it is hoped that

Vaccination will become gradually established at the several stations, and that experience will suggest the means of overcoming the difficulties which are at present felt.

(Signed) C. MOREHEAD,
Chairman of the Committee.

The following Resolutions were then passed :—

I. RESOLVED—That each Superintendent of Vaccination Station be requested to keep a register according to a fixed form of his Vaccinations, and to transmit to the Secretary of the Committee before the first Friday of each month a return of the Vaccinations at his Station during the preceding month, with a memorandum of his proceedings, and any remarks and suggestions he may wish to offer. (Copies of the Return will be supplied to each Station.)

II. That the Committee meet at 4 P. M. at the Grant College on the first Friday of each month, to consider the Vaccination Returns and Reports, to draw up a General Return, and Report, to be transmitted to the Secretary of the Society before the monthly meeting.

III. That the Committee meet at such other times, also, as may be necessary, for the transaction of business.

IV. That the subscriptions be realized, and an account opened with the Bank of Bombay, under the tittle " Grant College Medical Society Vaccination Fund,"—cheques payable on the signatures of the Chairman and Secretary.

V. That a copy of these resolutions be also transmitted to the Society with the Report.

The meeting was adjourned to Friday the 3rd March 1854, at 4 o'clock P. M.

(Signed) C. MOREHEAD, *Chairman.*
„ S. A. DE CARVALHO, *Secretary.*

Minutes of a Meeting of the Committee of the Grant College Medical Society, appointed to inquire into the subject of Vaccination, held in the College Library, on Friday the 3rd March 1854, at 4 o'clock P. M.

Present—

Dr. Morehead..... .....*Chairman.*

Messrs. Bhow Dajee; Atmaram Pandoorung; Burjorjee Dorabjee; and S. A. De Carvalho, *Secretary.*

The proceedings of the last meeting were read and confirmed.

The Monthly Returns for January and February, received from the following Vaccination Stations, were laid on the table, viz :—

Nagdevi Charitable Dispensary; Fort Gratuitous Dispensary; Matharpacady; Cande Waddy; Kavel; Colaba; and Chundunwady; after reviewing which the meeting was adjourned to Friday the 8th April 1854.

Remarks on the Prevalence of Small-pox in Bombay, and its Prevention by an extended System of Vaccination; published and distributed by the Vaccination Committee.

For several years past a very careful account has been kept of the number of deaths which take place in Bombay, and of the diseases by which the mortality is caused. This proceeding has been adopted, in the expectation that the facts which it brings to light may lead to the introduction of measures calculated to lessen the amount of disease and mortality.

From the information which has thus been collected, it appears that in the course of five years (from 1848 to 1852) 4,038 persons have died from Small-pox, and that of these 3,203 were children under seven years of age.

The same record informs us of the total number of children under seven years of age who have died during this period, and shows that in one-fourth of the number death was caused by Small-pox.

It is estimated, that of every four persons attacked with Small-pox, one dies. Thus, to give 4,038 deaths from Small-pox, there must have been 16,162 persons affected with the disease. It is of importance to note this, for Small-pox is not only a very serious disease, from the deaths which it occasions, but also because there is much injury done to a large proportion of those to whom it does not prove fatal.

Small-pox, then, is a very formidable disease in Bombay. In seasons in which it prevails, nearly 100 of every 1,000 deaths are caused by it, and of every 1,000 deaths in children under seven years of age, 241 are from Small-pox. In those who recover from the immediate effects of the disease, a large proportion remain permanently disfigured, or are otherwise injured in health.

It must be of very great importance to inquire and to determine whether by any practicable means these great evils may be lessened, and if they can, to leave no effort untried by which so great an end may be gained.

About sixty years ago, in all the countries of Europe, Small-pox prevailed to the same extent which it now does in Bombay, and caused very nearly the same amount of mortality. About fifty years ago it was observed that the cows in some parts of England were sometimes affected with an eruption on their udders, to which the names Cow-pox or Vaccinia were given. This disease was occasionally accidentally communicated to the hands of the milkers, and those to whom this happened were found in general to be safe from the infection of Small-pox.

The communication of Cow-pox is easily effected, by inserting a small portion of the matter of the eruption under the skin. This proceeding is called Vaccination.

In the countries in Europe in which the practice of Vaccination has been effectually carried out, not more than from 2 to 8 in every 1,000 deaths are from Small-pox, instead of nearly 100, which was the proportion in those countries before Vaccination was introduced, and which is now the proportion in Bombay.

There can be no doubt that if every inhabitant in Bombay who has not had Small-pox, or been vaccinated, were now to submit to the process of Vaccination, and if in future every child born were to be vaccinated within three months of its birth, that the same striking results would be obtained ; Small-pox would disappear after a time, and a great saving of life would be the consequence.

In order that no practicable means of effecting this great good

may be left unattempted, the Graduates of the Grant Medical College who are now resident in Bombay have resolved to practice gratuitous Vaccination at the stations on the days and hours entered in the accompanying list (page xciii). They solicit the earnest co-operation of the intelligent and charitable among their countrymen, in explaining to those around them less favoured by circumstances and education the facts stated in this paper, and the great benefits which it is now sought to confer upon them and upon their children.

In order, however, that the advantages of Vaccination may be truly secured to a community, it is necessary that certain important conditions should be carefully attended to :—

1*st*.—The vesicle resulting from the insertion of the vaccine matter must pass through a certain definite course, in order to give protection from Small-pox.

It is therefore absolutely necessary that every person vaccinated should be seen by the Vaccinator on the eighth day after the operation. Unless this precaution be strictly attended to, there can be no certainty that the advantages of Vaccination have been really secured.

2*nd*.—The greatest care should be taken that the vesicle, during its course, is protected from rubbing or other injury.

3*rd*.—Children should be vaccinated, when practicable, within three months after birth, for it appears that 148 children under the age of 7 months have died in Bombay in five years.

Lastly, it should be carefully explained, that Vaccination is unattended with any danger, and, beyond the slight puncture for the insertion of the matter, causes little inconvenience or discomfort to the child.

It should also be well understood, that though persons who have been successfully vaccinated are generally safe from attacks of Small-pox, yet they sometimes become affected with the disease.

When, however, persons who have been successfully vaccinated become thus affected, Small-pox in them is, with rare exceptions, a mild disease, seldom proving fatal, or causing disfigurement or injury.

APPENDIX Z.

Dr. *Sir Jamsetjee Jejeebhoy's Medical Prize Fund.* *Cr.*

1853.		Rs.	a.	p.	Rs.	a.	p.	1852.		Rs.	a.	p.	days	Rs.	a.	p.
Apr. 30th	To Balance	5,721	0	9	272	6	11	May 1st	By Balance	5,448	9	10	365	272	6	11
								1853.								
								Apr. 30th	Add Interest at 5 per cent. per annum	272	6	11				
	Rupees	5,721	0	9	272	6	11		Rupees	5,721	0	9		272	6	11

Dr. *Sir Jamsetjee Jejeebhoy's Medical Book Fund.* *Cr.*

1853.		Rs.	a.	p.	Rs.	a.	p.	1852.		Rs.	a.	p.	days	Rs.	a.	p.
Apr. 30th	To Balance	11,317	13	9	634	2	11	May 1st	By Balance	10,683	10	10	365	634	2	11
								1853.								
								Apr. 30th	Add Interest at 5 per cent. per annum	634	2	11				
	Rupees	11,317	13	9	634	2	11		Rupees	11,317	13	9		634	2	11

Dr. *Carnac Scholarship.* *Cr.*

1852.		Rs.	a.	p.	days	Rs.	a.	p.	1852.		Rs.	a.	p.	days	Rs.	a.	p.
May 4th	To Cash paid C. Morehead, Esq., Superintendent Grant Medical College, on this account	27	8	0	362	1	10	2	May 1st	By Balance.....	11,506	8	10	365	690	6	3
July 2nd	Ditto	137	8	0	303	6	13	7	1853.								
Aug. 2nd	Ditto	55	0	0	272	2	7	4	Apr. 30th	By Difference.....	669	10	8				
Sept. 1st	Ditto	55	0	0	242	2	3	0									
Oct. 1st	Ditto	55	0	0	212	1	14	8									
Nov. 2nd	Ditto	55	0	0	180	1	10	1									
Dec. 1st	Ditto	55	0	0	151	1	5	10									
1853.																	
Jan. 4th	Ditto	55	0	0	117	1	0	11									
Feb. 1st	Ditto	55	0	0	89	0	12	10									
Mar. 1st	Ditto	55	0	0	61	0	8	10									
April 1st	Ditto	55	0	0	30	0	4	4									
		660	0	0		20	11	7									
„ 30th	To Balance	11,516	3	6	I. B.	669	10	8									
	Rupees	12,176	3	6		690	6	3		Rupees	12,176	3	6		690	6	3

Dr. *Farish Scholarship.* *Cr.*

1852.		Rs.	a.	p.	days	Rs.	a.	p.	1852.		Rs.	a.	p.	days	Rs.	a.	p.
May 4th	To Cash paid C. Morehead, Esq., Superintendent Grant Medical College	25	0	0	362	1	7	9	May 1st	By Balance.....	12,605	15	8	365	756	5	9
July 2nd	Ditto	25	0	0	303	1	3	11	1853.								
Aug. 2nd	Ditto	10	0	0	272	0	7	1	Apr. 30th	By Difference of Interest at 6 per cent. per annum	751	6	8				
Sept. 1st	Ditto	10	0	0	242	0	6	4									
Oct. 1st	Ditto	10	0	0	212	0	5	7									
Nov. 2nd	Ditto	10	0	0	180	0	4	9									
Dec. 1st	Ditto	10	0	0	151	0	4	0									
1853.																	
Jan. 4th	Ditto	10	0	0	117	0	3	0									
Feb. 1st	Ditto	10	0	0	89	0	2	4									
Mar. 1st	Ditto	10	0	0	61	0	1	7									
April 1st	Ditto	10	0	0	30	0	0	9									
		140	0	0		4	15	1									
„ 30th	To Balance	13,217	6	4	I. B.	751	6	8									
	Rupees	13,357	6	4		756	5	9		Rupees	13,357	6	4		756	5	9

Dr. *Anderson Scholarship.* *Cr.*

1852.		Rs.	a.	p.	days	Rs.	a.	p.	1852.		Rs.	a.	p.	days	Rs.	a.	p.
May 4th	To Cash paid C. Morehead, Esq., Superintendent Grant Medical College, on this account	30	0	0	362	1	12	7	May 1st	By Balance	12,992	11	1	365	779	9	0
									1853.								
July 2nd	Ditto	162	8	0	303	8	1	6	Apr. 30th	By Difference of Interest at 6 per cent. per annum	755	3	7				
Aug. 2nd	Ditto	65	0	0	272	2	14	6									
Sept. 1st	Ditto	65	0	0	242	2	9	4									
Oct. 1st	Ditto	65	0	0	212	2	4	3									
Nov. 2nd	Ditto	65	0	0	180	1	14	9									
Dec. 1st	Ditto	65	0	0	151	1	9	10									
1853.																	
Jan. 4th	Ditto	65	0	0	117	1	4	0									
Feb. 1st	Ditto	65	0	0	89	0	15	2									
Mar. 1st	Ditto	65	0	0	61	0	10	5									
April 1st	Ditto	65	0	0	30	0	5	1									
		777	8	0		24	5	5									
„ 30th	To Balance	12,970	6	8	I. B.	755	3	7									
	Rupees	13,747	14	8		779	9	0		Rupees	13,747	14	8		779	9	0

Dr. *Reid Scholarship.* *Cr.*

1852.		*Rs.*	*a.*	*p.*	days	*Rs.*	*a.*	*p.*	1852.		*Rs.*	*a.*	*p.*	days	*Rs.*	*a.*	*p.*
July 2nd	To Cash paid C. Morehead, Esq., Suerintendent Grant Medical College, on this account	50	0	0	303	2	1	2	May 1st	By Balance.....	8,757	0	8	365	437	13	7
									1853.								
Aug. 2nd	Ditto	20	0	0	272	0	11	11	Apr. 30th	By Difference of Interest at 5 per cent. per annum	432	1	3				
Sept. 1st	Ditto	20	0	0	242	0	10	7									
Oct. 1st	Ditto	20	0	0	212	0	9	3									
Nov. 2nd	Ditto	20	0	0	180	0	7	11									
Dec. 1st	Ditto	20	0	0	151	0	6	7									
1853.																	
Jan. 4th	Ditto	20	0	0	117	0	5	1									
Feb. 1st	Ditto	20	0	0	89	0	3	11									
Mar. 1st	Ditto	20	0	0	61	0	2	8									
April 1st	Ditto	20	0	0	30	0	1	3									
		230	0	0		5	12	4									
„ 30th	To Balance	8,959	1	11	I. B.	432	1	3									
	Rupees	9,189	1	11		437	13	7		Rupees	9,189	1	11		437	13	7

Dr. *The Obstetric Institution Fund.* *Cr.*

1853.		*Rs.*	*a.*	*p.*		*Rs.*	*a.*	*p.*	1852.		*Rs.*	*a.*	*p.*	days	*Rs.*	*a.*	*p.*
Apr. 30th	To Balance.....	12,889	7	10	I. A.	201	9	10	Dec. 7th	By Cash received from C. Morehead, Esq., Secretary, on this account	12,687	14	0	145	201	9	10
									1853.								
									Apr. 30th	By Amount of Interest at 4 per cent. per annum	201	9	10				
	Rupees	12.889	7	10		201	9	10		Rupees	12,889	7	10		201	9	10

Bombay, Accountant General's Office, 7th February 1854.

(Errors excepted)

(Signed) E. E. ELLIOT, Accountant General.

(True copy)

(Signed) C. MOREHEAD, Principal.

APPENDIX No. XX.

LETTER FROM GOVERNMENT IN REPLY TO REPORT.

No. 2536 OF 1854.

GENERAL DEPARTMENT.

To M. STOVELL, Esquire,

Secretary to the Board of Education.

SIR,

I have been directed to communicate the following observations on the Report of the Board of Education for the past year.

2. Government remark with pleasure, that while all previous years have more or less brought with them marked indications of progress, the year under report still stands prominently in advance of its precursors. In the English Schools, the number of students has increased, and the course of instruction extended. The Vernacular Schools have assumed a more healthy state; attendance has improved, the subjects of study have augmented, and superintendence has become more efficient. An increased anxiety for education, even at a pecuniary sacrifice, has been strongly evinced, especially in Khandesh. The new Poona College is reported to be advancing rapidly in character and influence, while the Elphinstone Institution continues in its usual state of progress, the number of its first year students now exceeding that of the entire College eight years ago. Add to this the grant of three new Chairs to the Medical College, of Pensions to the entire educational establishment, and of Rs. 50,000 per annum (making the annual Government subscription to the cause

of education Rs. 2,50,000), and we have at a glance the favourable and important incidents of the year.

3. Encouraging as these prospects are, and great as have hitherto been the anxieties and efforts of Government in this branch, the Right Honorable the Governor in Council cannot but look on the question as one, the complete and perfect success of which rests rather with the governed body than the governing. He looks, therefore, with much satisfaction on the public-spirited efforts made by the heads of society in Khandesh, directed to so successful an issue by the tact and influence of Messrs. Kane, Mansfield, and Anderson. He regards, too, with marked pleasure, the personal efforts and sacrifices of the Pant Pratinidhi at Atpadi, and of Jotee Govind Row at Poona, as well as the liberal contributions of Keebay of Indore, and the Raja of Dhar.

4. The attempt to establish a self-supporting School at Sholapoor has, it is true, failed ; but His Lordship sees in this no ground for despondency. More than one effort was required in Khandesh, and Sholapoor may require many. But if made by the leading members of society, directed and influenced by the Judge and Magistrate, His Lordship is convinced that, as in Khandesh, success sooner or later must follow, and the reproach be thus wiped out of being, together with Kaira, the only Collectorate in the Presidency devoid of an English School. The Natives of this country have been so long in the habit of looking to Government for all things, great and small, that they have learnt purposely to withhold their aid, under the impression that Government will do whatever they leave undone. But they must be taught that Government, though willing to assist and to direct their endeavours, cannot dispense with them, and that in educational, municipal, and sanitary reform, Government must have the cordial and united aid of the public, or fail to attain for them that state, moral and physical, to which the views of Government ultimately aspire.

5. His Lordship therefore regrets to learn, that several towns have been backward in replying to the call of the Board to defray half of the expense of their English Schools. This, owing to the impression above alluded to, was to be expected. But

His Lordship considers that the appeal should be repeated again and again until successful, and if made through the proper local channels of influence, and urged by them with sufficient perseverance and tact, His Lordship cannot for an instant doubt the issue.

6. On the other hand, it is pleasing to observe that several private preparatory Schools have lately sprung up at the Presidency, and that the Board consider the time not far distant when preliminary Vernacular instruction in Bombay will be left to private teachers.

7. In their Report for 1851, the Board complained of the want of higher paid, more competent, and better instructed teachers. Considerable progress has, it appears, been made towards supplying this great desideratum; and His Lordship expects that the grant of pensions to the entire educational establishment, with the further annual grant of Rs. 50,000, will effectually remove all vestige of this complaint. To this end, the plan referred to in paragraph 57, of making teachers measure their strength against each other in examinations, and of classing them in order, will, His Lordship hopes, be highly conducive.

8. The observations of the Board on the educational system introduced into Katiawar seem just, and their proceedings are fully approved. Although the salary of the officer holding the double office of Head Master and Superintendent of Branch Schools exceeds that of any Native official in the province, the fact, far from calling for objection, will only serve still further to show the inhabitants the importance which Government attach to education, and the high estimation in which those engaged therein are held.

9. His Lordship likewise approves of the tutors appointed by the Political Agent to the Chiefs being brought on the strength of the educational establishment. The Provincial Superintendent of Schools may, in concert with these tutors, do much towards establishing and extending branch Vernacular Schools throughout the province.

10. Government fully approve of the introduction into the Schools of the Civil and Criminal Regulations, Village and District Accounts, and Survey Rules. Government graduates have

doubtless hitherto found, at our official examinations, that despite all their acquirements, they were unable to compete with men who, inferior in other respects, had yet learnt such detail in the Government offices.

11. His Lordship awaits the promised Report of the Elphinstone Institution. In paragraph 32 it is said to be in the appendix, and there stated to be in the Printing Press. The state of this Institution, as depicted by the Board, seems to be one of marked amelioration and progress; and the Principal and the Professors have, His Lordship considers, fully earned the warm thanks of Government for the manner in which they have conducted their duties, as well as for their arduous and successful examination labours in awarding 47 scholarships among 117 competitors.

12. The state and progress of the Poona College seem highly satisfactory, and reflect much credit on the Principal and the Professors, Native and European.

13. The labours of the Principal and Professors of the Grant Medical College have met with their usual success, and the only ground of regret lies in the fact of the College being temporarily deprived of Dr. Morehead's valuable services by ill health.

14. Dr. Morehead's proposition for converting the College compound into a well-arranged botanical garden, for the use of students, will be separately considered.

Paragraph 111. *Dr. Morehead's Report, paragraph* 16.

15. His Lordship will anxiously await the Board's promised report on the measures adopted in consequence of the new grant of Rs. 50,000 per annum.

16. The corrective measures detailed in paragraph 103 are approved, and their results considered satisfactory.

Closing unpromising Schools.

17. The details of the Mofussil Schools, which are clearly and concisely given, call for no special remark. Their state is generally encouraging, and highly creditable to the Superintendents and most of the Masters. His Lordship is glad to perceive that Native Libraries—some, too, of spontaneous growth and origin—are on the increase.

18. In conclusion, I am directed to convey to the Members

of the Board, and Secretary, the thanks of Government for the report under review, and for their zealous and successful exertions in behalf of education, therein detailed. I am at the same time to intimate that His Lordship looks on the work as one in which to pause is to recede; and that therefore no year can be deemed satisfactory which does not bring with it a large amount of progress. And to ensure this continued progress, it is, His Lordship considers, essential, that the Board should make unremitting efforts towards awakening in the minds of the people a sense of their own individual responsibilities, and of the need of their co-operation.

19. His Lordship hopes at an early period to address the Board on the subject of organizing throughout the Presidency a general system of *village* education.

20. The Right Honorable the Governor in Council authorises the publication of the Board's Report.

I have the honour to be,

Sir,

Your most obedient Servant,

(Signed) C. E. Fraser Tytler,
Officiating Secretary to Government.

Bombay Castle, 5th August 1854.